

# MANAGEMENT METHODS

JULY 1956

PRACTICAL SOLUTIONS TO ADMINISTRATIVE PROBLEMS

BUSINESS ADMINISTRATION  
LIBRARY

JUL 13 1956

How to formulate a  
policy for executive transfer

LICKING THE ENGINEER SHORTAGE

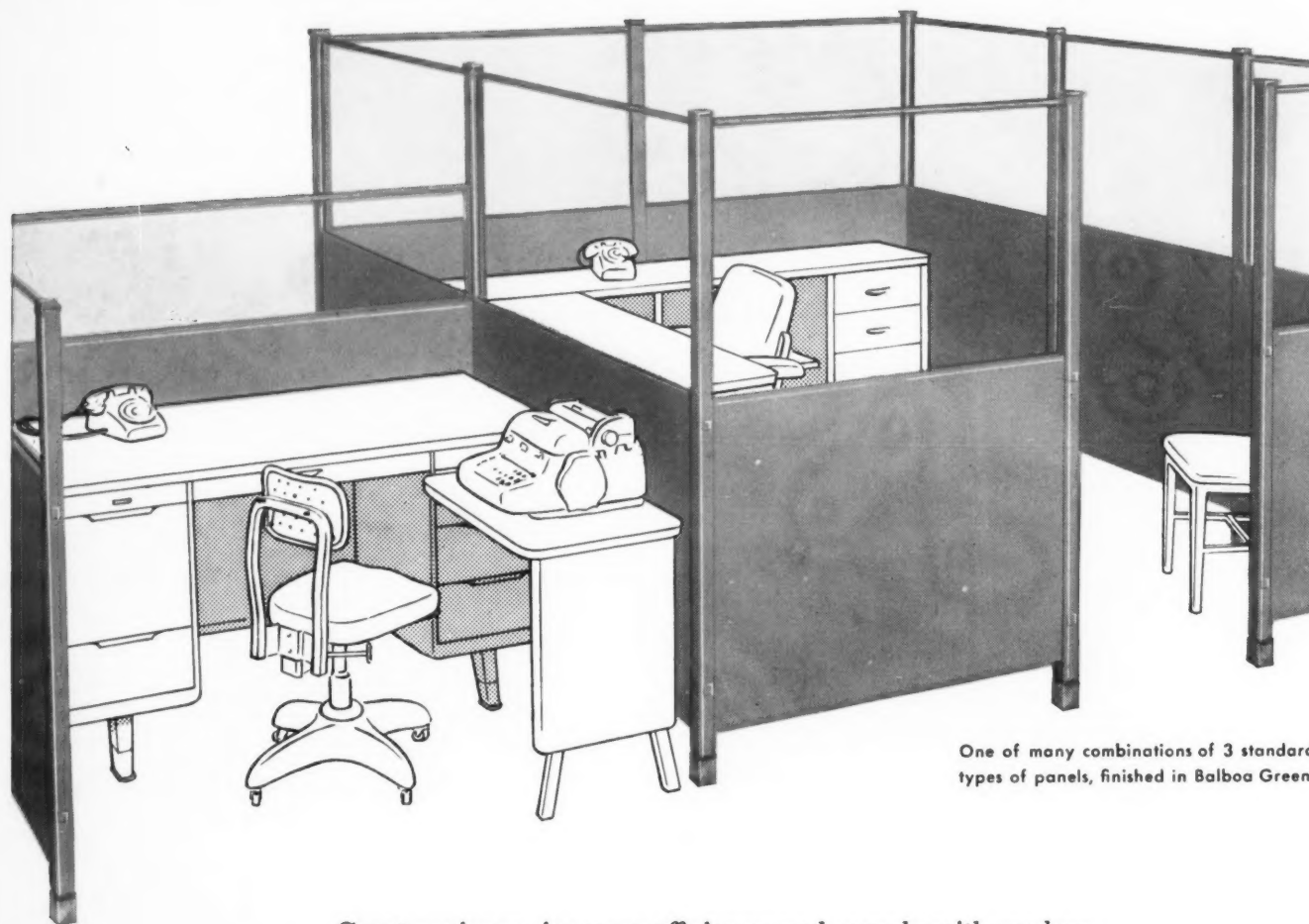
*How to prevent accidents  
by predicting them*



***Do executives spread rumors?***

SEE PAGE 11

## Offices tailor-made for every job with GF STEEL PARTITIONS



One of many combinations of 3 standard types of panels, finished in Balboa Green.

*Create privacy, increase efficiency and morale with modern color-styled partitions, adjustable to any floor space*

You can use GF steel partitions to tailor an outer-office layout into efficiently arranged work enclosures, individual offices and open-end sections. Thus, with minimum disturbance and least expense, you give the dignity of privacy to workers and add to office efficiency. And you also add beauty, as GF partitions are available in quiet blending wall colors of Balboa Green and Pebble Beige. Also available in 160 Gray.

The flexibility of assembly possible with standard-size posts, panels and doors allows for office arrangements in

all shapes and sizes. Alterations can be made quickly and easily in any direction to meet future layout changes. No interference with present or future heating or ventilating systems. Furnished in four standard heights, panels can be fitted with inserts of clear or opaque glass, solid steel or acoustical material.

As compared to plastered walls, GF partitions take up less floor space and cost only about one-third as much. They can be moved by your own maintenance men with no repairs needed to floors, walls or ceilings. For full infor-

mation, visit your local GF showroom (see classified directory), or write for catalog in color. The General Fireproofing Company, Department M-56, Youngstown 1, Ohio.



NOTE-MAKER DESKS • GOODFORM  
ALUMINUM CHAIRS • SUPER-FILER  
MECHANIZED FILING EQUIPMENT •  
GF ADJUSTABLE STEEL SHELVING

**GF metal business furniture is a good investment**

(Circle 117 for more information)

## MANAGEMENT METHODS Vol. 10 No. 4

22 West Putnam Avenue, Greenwich, Connecticut

**Publisher**  
Jerome W. Harris

**President**  
William S. Kline

**Editor:** J. W. Harris  
**Managing Editor:** Ira J. Bilowit  
**Feature Editor:** Myron Chefetz  
**Art Director:** Laurence Lustig  
**Editorial Consultant:** Leslie M. Slote  
**Editorial Production:** Argyll S. Copeland

**Circulation:** Carol Johnson  
**Office Manager:** Edith A. Pagnotta

**Dir. Editorial Developm't:** Richard R. Conarroe

### Advertising Offices

**New York** 141 East 44th Street, MU 7-0583  
Advertising Sales Manager: Charles L. Dermott  
Richard H. Edlund—Harrison M. Rollins

**Chicago** 612 North Michigan Avenue, Del 7-0112  
Western Advertising Manager: William S. Hutchings  
Alfred A. Spelbrink

**Los Angeles** The Robert W. Walker Co., 2330 West Third Street  
Dunkirk 7-4388

**San Francisco** The Robert W. Walker Co., 57 Post Street  
Sutter 1-5568

### A publication of MANAGEMENT MAGAZINES, INC.

22 West Putnam Avenue, Greenwich, Conn.  
Greenwich 8-7330, 8-6927

President and Treasurer, W. S. Kline; Vice President and Secretary,  
J. W. Harris; Vice President, A. J. Kaiser



Member of Business Publications Audit

**SUBSCRIPTIONS:** In United States and Possessions, one year \$5.00. Canada, one year \$6.00. Single copies 0.50. Copyright © 1956 by Management Magazines, Inc. Accepted as controlled circulation publication at Bristol, Connecticut. Published monthly by Management Magazines, Inc., Emmett Street, Bristol, Conn.

**Policy re manuscripts:** The object of MANAGEMENT METHODS is to offer practical solutions to administrative problems. For that reason we never highlight a problem without offering at least a partial solution or a recommended course of action. Whenever possible, we like to offer the reader something he can do right now to correct a procedure or solve a problem in his business.

Much of our editorial material comes from business and management specialists, as well as from active businessmen, at all levels of management. We endeavor to return all manuscripts. However, we assume no responsibility for material not specially requested by us.



100	110	120	130	140	150	160	170	180	190	200	210	220	230	240
101	111	121	131	141	151	161	171	181	191	201	211	221	231	241
102	112	122	132	142	152	162	172	182	192	202	212	222	232	242
103	113	123	133	143	153	163	173	183	193	203	213	223	233	243
104	114	124	134	144	154	164	174	184	194	204	214	224	234	244
105	115	125	135	145	155	165	175	185	195	205	215	225	235	245
106	116	126	136	146	156	166	176	186	196	206	216	226	236	246
107	117	127	137	147	157	167	177	187	197	207	217	227	237	247
108	118	128	138	148	158	168	178	188	198	208	218	228	238	248
109	119	129	139	149	159	169	179	189	199	209	219	229	239	249

Also send information on .....

Name .....

Title .....

Company .....

Address .....

City ..... Zone ..... State .....

No. Employees in Firm .....

Type of business ..... July, 1956

**FOR MORE  
INFORMATION**

*on products or  
methods described  
in this issue*

**CIRCLE  
THE KEY NO.**  
*and mail this  
card*

FIRST CLASS  
PERMIT No. 337  
(Sec. 34.9, P.L.&R.)  
Greenwich, Conn.

**BUSINESS REPLY CARD**

No Postage Stamp Necessary if Mailed in the United States

3c.-POSTAGE WILL BE PAID BY—

MANAGEMENT MAGAZINES, INC.  
22 West Putnam Avenue  
GREENWICH, CONN.





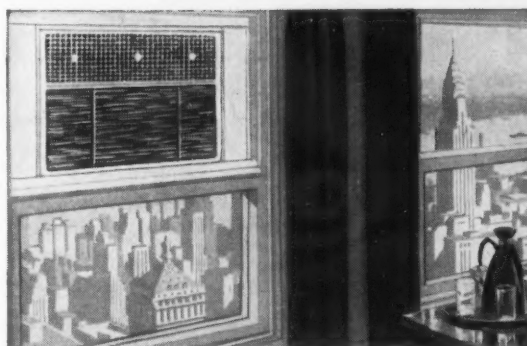
Rumors and the executive grapevine .....	11
How to formulate a policy for Executive Transfer .....	15
How to lick the engineer shortage .....	19
An automation first: Electronic Formulation .	28
Why Management Methods is changing its size	30
Getting the most from a branch office .....	33
How to gain warehouse space .....	34
An exhibitor's guide to Trade Show participation .....	41
Where they work: Richard S. Boutelle .....	42
A report on company policies for Lost & Found departments .....	44
How General Foods prevents accidents by predicting them .....	45
Unique billing system cuts costs and meets expansion needs .....	49
Complete entry blank and rules for Best Place to Work awards .....	50

## DEPARTMENTS

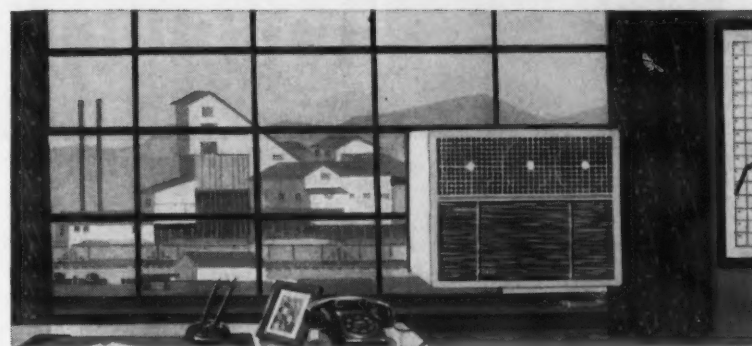
Consensus: Electronic briefs worth repeating .	4
Tax quiz: Recent tax court cases .....	8
Books for management .....	14
Sales ideas: How to use motion pictures to sell technical products .....	26
Thought starters: .....	31
Using blind workers in in-plant feeding operations	
New envelope clasp saves time and money	
Bank stickers simplify new account transfer process	
New literature of interest to management	
Planning ideas: .....	36
Low cost carpet squares achieve unique design	
Designer creates office suited for lady executives	
Executive suite provides space without clutter	
Diagnostics for management .....	51
Clippings: New products for the office .....	52

**COVER PHOTO:** Four top executives at American Machine and Foundry Company enjoy a well-earned coffee break. Surveys have shown the coffee-break to be the peak time for spreading company news. See page 11 for "Rumors and the executive grapevine."

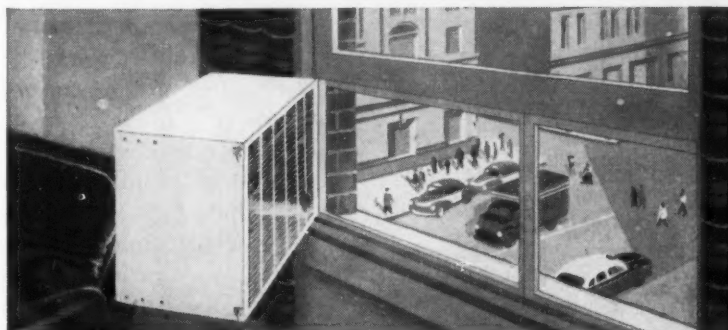
# New G-E Thinline Room Air Conditioner fits anywhere—takes up 1/3 less space



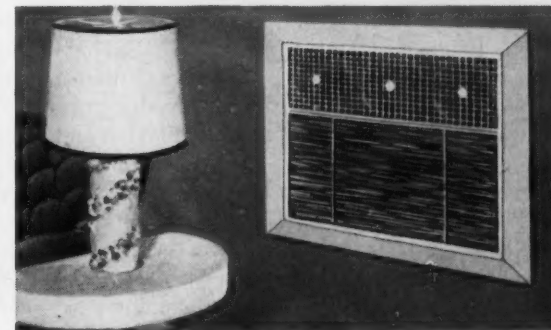
Fits in upper or lower half of double-sash window.



Fits casements, too—without alteration or mutilation of window.



Can be installed to swing open —allows access to outside for cleaning.



Through-the-wall installation —in new or old buildings.

## Amazing versatility gives old and new buildings low-cost, area-by-area air conditioning

Because of its unique spacesaving design, the General Electric Thinline Room Air Conditioner can be installed in virtually any window space with little or no projection either inside or out.

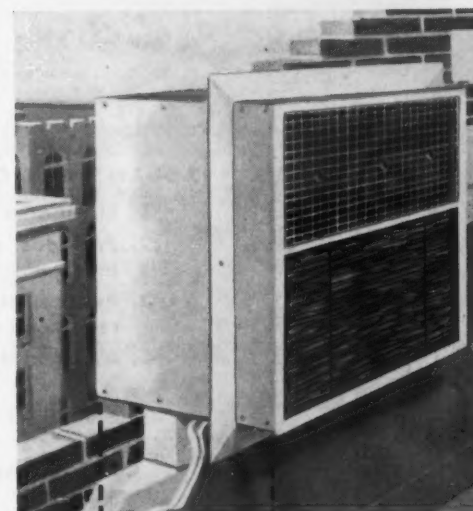
It can even be installed either all-inside or all-outside the windows and still project less than previous corresponding models.

Thinline Room Air Conditioner installation offers you efficient, low-cost operation by cooling only the areas of the building in use at any given time. With an Accessory Timer, available

at slight additional cost, Thinline can be set to go on and off automatically on a pre-arranged schedule for a seven-day cycle.

When you invest in Thinline, you are assured of General Electric's famous dependability. You can rely on prompt delivery and installation. All units backed by a written guarantee.

The G-E Thinline is available in 1/2, 3/4 and one horsepower models, all in the same sized housing. General Electric Company, Appliance Park, Louisville 1, Kentucky. Most models available in Canada.



Only 16 1/2 inches thin

Fits flush with wall, with little or no overhang. To install through the wall in new construction, build in the all-metal sleeve where you intend to place a Thinline. Seal the sleeve until you are ready to install the unit. Then, slip the unit into the sleeve for weather-tight installation.

Progress Is Our Most Important Product  
**GENERAL ELECTRIC**

(Circle 116 for more information)

## General Chemical Division ALLIED CHEMICAL & DYE CORPORATION

*cuts form preparation costs*

**\$25,000 a year with Flexowriter®**  
AUTOMATIC WRITING MACHINE



**G**eneral Chemical Division, Allied Chemical & Dye Corporation of New York City, manufactures more than 1,000 chemicals and chemical compounds.

Each is packaged in various sizes bringing the total number of items to about 5,000.

Prior to the installation of Flexowriters, their order writing and billing was typed manually with the normal errors that creep in when a large volume of work is handled under pressure. The result: additional costly repetitive typing and delays.

Since mechanizing their order writing and billing with Flexowriters, General Chemical estimates annual savings of \$25,000.

Using the Flexowriter automatic writing machine that punches and reads "common language" tape, a master tape containing name, address, special instructions and other repetitive data, is prepared for each customer. This tape is then fed back through the Flexowriter which automatically fills in the shipping order. Items, quantity and other variable data are quickly typed in.

A by-product tape containing all the shipping order data is sent to the Billing Office for actuating tape-to-card equipment for tabulating cards which in turn are used for invoicing and preparation of Accounts Receivable reports.

### ADVANTAGES OF FLEXOWRITER SYSTEM

1. Eliminates repetitive typing.
2. Provides greater accuracy in processing invoices.
3. Reduces Billing Office personnel requirements.
4. Accelerates Billing.

MAIL THIS COUPON NOW FOR FULL INFORMATION

### COMMERCIAL CONTROLS CORPORATION

Subsidiary of Friden Calculating Machine Co., Inc.

Dept. MM-76 1 Leighton Ave., Rochester 2, N. Y.

- ☐ Send folio "How Flexowriters Integrate Data Processing."  
☐ I would like to see a FLEXOWRITER demonstration.  
☐ We are interested in FLEXOWRITERS for.....

Name.....

Company.....

Address.....

City.....State.....

(Circle 108 for more information)



Sales and service offices listed in classified telephone directory under "Typewriters—Automatic."

## consensus

ELECTRONIC BRIEFS WORTH REPEATING

### Smallest computer available

The smallest, lightest, and lowest power-consuming computer, Philco's TRANSAC, has just become available for civilian use. TRANSAC employs a system of direct-coupled transistors, which eliminates large numbers of electronic circuit components and vacuum tubes. The applications for this "electronic brain" are unlimited. The most obvious uses, of course, would be for accounting and product control.

Few small businesses can afford the large-scale machines heretofore necessary for complex computations. Installation alone usually requires a considerable amount of valuable space; air-conditioning for cooling vacuum tubes; high power requirements; capacity beyond that needed for the particular operation (contributing to high initial cost).

A computer now can be constructed in building-block fashion, requiring unbelievably small amounts of power, that will operate approximately 10 times as fast as comparable computers. Work for the Government with this equipment has verified these facts.

For more details, circle number 237 on the Reader Service Card.

### Electronic addressing

A two-ton electronic robot is capable of cutting 50% off many of the production costs of direct mail advertising and subscription mailings, according to its purchaser, Names Fulfillment, Inc.

The first production model of Burroughs Series G high speed Printer-Punch line processed name and address labels at the rate of 900 lines a minute for the news-letter of

the Esquire-Coronet credit and courtesy charge club. Among the details it was able to accomplish, it "recognized" the names of those who had not used their charge privileges the previous month, separated their cards from the master card file, and addressed promotion pieces to that group of stay-at-homes urging them to dine out and use their charge privileges—all as a result of one quick pass of the input cards through the machine.

In the past, the production alone of a million names-and-addresses for mailing purposes used to involve 200 hours, five machines, and a total cost of over \$5300. This machine can handle the same work load in 75 hours at a total cost of \$2400. It is said to be the fastest punched-card fed printing process yet developed for accounting and document production purposes—over 41,000 characters a minute.

Subsequent models will also incorporate a slave card-punching and printing unit which will punch a punched-card and print on both sides of it simultaneously. These cards, which might be bills or "please return" promotion pieces, would later serve as automatic input media to the company's accounting system when returned.

Other models are now in production with two input card-feeds. These models can "read" and print related information from two separate stacks of punched cards simultaneously without requiring a physical merging of the cards, reducing speed, or mixing up the data.

For more details, circle number 230 on the Reader Service Card.

### British automation lags

Technically, Britain is as far advanced as the U.S.A. in the elec-

MANAGEMENT METHODS



tronic computing field. But the gulf between achievement in the laboratory and application in the workshop or the office is much wider.

In the U. S. A. dozens of large computers are already working for private firms. Many more will be delivered during the next 12 months. In Britain the present situation—and the prospect—are entirely different. According to the Earl of Halsbury, managing director of the National Research Development Corporation, the number of British computers available from all sources during the next *two* years will be about 20. Not a particularly good performance for the country which built the first all-electronic computer in 1948!

Lord Halsbury pointed out that the Americans' swift progress in this field was due in some ways to the positive lead given by U.S. government departments, whose adoption of the early machines had provided valuable operational experience.

In that country average expenditure on computer development was about 250 million dollars. In Britain, government expenditure on computer projects amounted to about £2 million. So the Americans were spending 45 times as much—or 15 times as much per head of the population.

How can Britain get more computers into operation? The only answer, in Lord Halsbury's view, is for firms capable of using such machines to decide what they want—and to make sure that the computer manufacturers know about it.

BUSINESS, *British Journal of Management*, May, 1956.



#### **Automatic forms burster**

A new forms burster, employing electronic timing and dialing for exact automatic form length adjustment, will reduce much of the time and labor normally spent in

**When it  
comes to POSTING...  
these 10 keys  
make all  
the difference**

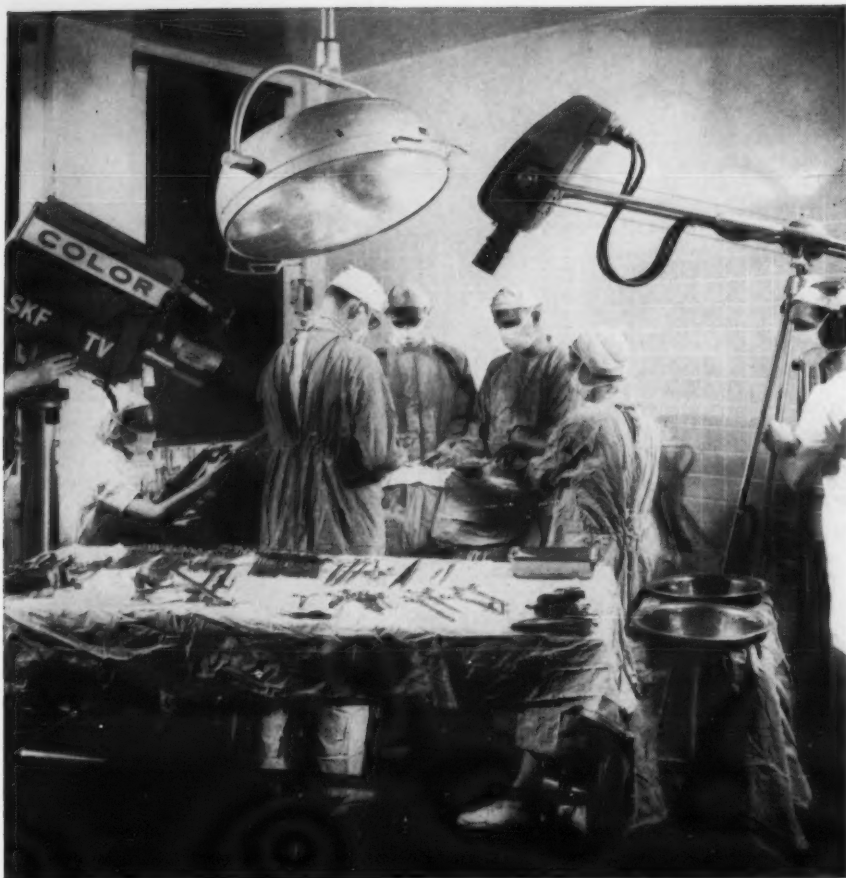
Underwood Sundstrand's 10-key touch-operated keyboard is easy to learn, increases your operators' speed and accuracy, ends eyestrain and "head-swing" fatigue. It's a "natural" for posting—

Accounts Receivable right through to General Ledger. The keynote is simplicity—the simplicity of the new standard in keyboards—10 keys. For full details, call your Underwood Office, or write:

**UNDERWOOD  CORPORATION**

ONE PARK AVENUE, NEW YORK 16, N. Y.

(Circle 142 for more information)



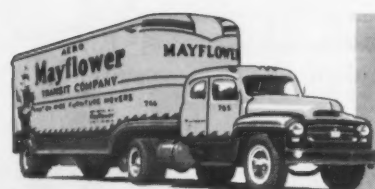
## Operation Moving Van . . .

► No, the doctors are not operating on a moving van. But an Aero Mayflower moving van has been helping the doctors learn operating technique since 1949 by moving over 20,000 pounds of color television equipment throughout the United States and Canada for closed circuit television programs. Mayflower has been handling this delicate equipment for the pharmaceutical house of Smith, Kline and French of Philadelphia.

Mayflower moves similar fragile shipments safely every day. *Your* precious household goods, or the goods of your personnel will get the same expert handling, the same gentle care. For the safe, easy way to move long distance, call your local Mayflower agent.

**AERO MAYFLOWER TRANSIT COMPANY, INC. • INDIANAPOLIS**

Mayflower Service is available through selected warehouse agents throughout the United States and Canada. Your local Mayflower agent is listed under Moving in the classified section of your telephone directory.



**AERO  
Mayflower**  
NATION-WIDE  
FURNITURE MOVERS

**America's Finest Long-Distance Moving Service**  
(Circle 101 for more information)

adjusting mechanical bursters to new form lengths. By twisting a dial, 23 different lengths, ranging from 3" to 22", may be handled simply and efficiently.

The change can be made even while the machine is in action and, because of friction feed, one row or both rows of marginal holes may be removed before bursting.

A built-in system of safety interlocks turns the machine off if, for some reason, a form fails to burst, a misfeed occurs, or forms run out. Spoilage and waste are prevented and safer operation is guaranteed.

For more details, circle number 232 on the Reader Service Card.



### Equalizing computer workload

As computers become more nearly a standard tool of management, a familiar question arises: given the unfortunate fact that volume of work varies, what is the most economical size of machine to get? A computer that is too small will lead to too many jams, while an overly-large machine will work at capacity for such a small proportion of the time that its cost will be inordinately high.

A way out of this dilemma is indicated by a study recently completed by the National Bureau of Standards, in association with the Navy's Bureau of Supplies and Accounts. The specific problem used as a basis for the study was inventory control. It was of great interest to the Navy, with its widely-scattered warehouses, and is similar to those faced by many industries.

SEAC, the NBS computer permanently located in its Washington headquarters, handled the task that might be assigned to a computer in a warehouse, receiving stock transaction reports, tabulating and summarizing them for fiscal accounting. DYSEAC, the Bureau's newer computer which is contained in its own trailer, acted as the central computer for maintaining inventory control records. The two were linked by a simple two-strand cable, which is the same as those



## "Secrets"

on your Business Forms

American Lithofold  
**"SECRET SPOT"**  
Carbon Paper  
**OMITS**  
any information  
in any position  
on any part of any form

### MODERN! EFFICIENT! FOOLPROOF!

Far superior to block-outs, cut-outs, carbon spots and other previous methods.

Our exclusive process creates desensitized areas ("Secret Spots") which automatically prevent carry-through of entries. Permit closer register, and wider variation of size and shape.

**"SECRET SPOTS"** give you

**POSITIVE CONTROL OF INFORMATION**  
— variable on each part of any form.

**DELETION WITHOUT DEFACING**

— provides neater, more dignified forms.

**ACCURATE POSITIONING ANYWHERE**  
— any size, shape or number per sheet.

**OPEN AREAS AVAILABLE**  
— for printed instructions, advertising, records, etc.

Available on:

LITHOSTRIP marginally punched, continuously interleaved forms and

LITHOSET one-time carbon sets.

Write today for full details and  
**FREE SAMPLE SET.**

**AMERICAN**  
*Lithofold Corporation*  
500 BITTNER ST. ST. LOUIS 15, MO.  
(Circle 102 for more information)

MANAGEMENT METHODS



that can be leased from the telephone company.

DYSEAC was assigned a continuing program, but when it got a signal from SEAC indicating that the latter had information ready to send it, operations would be suspended at the first convenient point, and DYSEAC would tell SEAC to go ahead and send in its data. When that was completed and acknowledged, DYSEAC would return to its original job until it got another message from SEAC.

This linking of computers, all of the digital type, and with the proper controls built in, can lead to many possibilities of importance. As in the example, a central computer might receive data from one or more subsidiary computers, according to a pre-determined reporting schedule. However, any of the computers could break in with a priority report, with the master computer handling it, and then automatically returning to schedule.

Such a linkage could also equalize work throughout a system. When one local computer found itself overloaded and unable to meet its deadline, it could call on the master computer for help. The master, in turn, would locate another local computer with capacity and assign work to it, transferring the results back to the source upon completion.

Larger computers can be made available, on a rental basis, to back up the capacities of smaller machines. The existence of such a service would mean that a company could count on buying only as large a computer as would be needed to take care of normal needs, relying on rented capacity for peak periods.

The key to this interchange is the ability of DYSEAC and other similar computers to respond to automatic interruption, rather than merely to programmed control. The latter must depend upon human anticipation of how and when the interchanges of information should occur, while automatic interruption permits the machine to function smoothly without loss of time under conditions that could not be anticipated in advance.

**Takes a secretary**  
less than 20 minutes to do an  
"all-day" retyping job

**Takes a boss**  
less than half the time formerly  
needed to answer his mail



## Kodak's new Verifax Signet Copier quickly pays for itself even in the "one man" office

**Only \$148 . . .** that's an unheard-of low price for an office copier. *An incredibly low price* for a Verifax Copier, which does so many jobs beyond the scope of ordinary office copiers.

**See all the extras the Verifax Signet gives you at a new low cost—**

- ☐ **Makes 5 copies in 1 minute for 2½¢ each.**
- ☐ **Nothing is ever left out** on Verifax copies—they're photo-exact from letterhead to signature. This is especially important when you're copying legal documents.
- ☐ **Photo-lasting.** Verifax copies are not affected by summer heat—are as long lasting as any business record.
- ☐ **Easy to read, handle, file.** Verifax copies have the "look" and "feel" of fine letterhead papers.
- ☐ **Signet makes copies on preprinted office forms,** on card stock and film—and on both sides of copy paper.
- ☐ **Makes a translucent "whiteprint" master** for use in direct-process and blueprint machines.
- ☐ **Makes an offset plate in 1 minute** for less than 20¢, when low-cost adapter is used.

Your savings the very first month will probably pay for  
(Circle 112 for more information)

your Signet. Imagine being able to answer letters without dictation and typing . . . never having to send an "I quote" memo. Never having to retype for extra carbons.

**Get all the facts on the Signet.** Free folder describes this remarkable \$148 copier in detail; gives facts, too, on complete line of Verifax Copiers. *Also sent free . . .* valuable booklet revealing some of the short cuts Verifax Copiers have brought to thousands of offices.

**MAIL COUPON TODAY—**

EASTMAN KODAK COMPANY  
Business Photo Methods Division  
343 State St., Rochester 4, N. Y.

Gentlemen: Please send free Signet folder, "Short Cuts" booklet, and names of near-by dealers. No obligation.

197-7

Name \_\_\_\_\_ Position \_\_\_\_\_

Company \_\_\_\_\_

Street \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_

**Kodak**  
TRADE-MARK

## WAUKESHA FOUNDRY

### REDUCES INVOICE AND SHOP FORMS 70% WITH COLITHO OFFSET DUPLICATING PLATES

The urgent problem of the Waukesha Foundry Company was to streamline its 17-part combination invoice and shop-copy forms. Aside from being obviously unwieldy, the old system absorbed countless manhours in typing and checking—and presented many chances for transcription errors.

The invoice set was reduced to five parts. The necessary shop copy forms containing all the vital technical data for each job are reproduced from Colitho Direct Image Paper Plates.

The total parts of the invoice set are reduced by more than two thirds, transcription errors are automatically eliminated and costly hours of retyping and checking time are saved. And the same Colitho Plate produces all shop-copies—uniform, original-looking copies—in perfect registration and in any amounts required.

This case history demonstrates the economy and efficiency that countless businesses now enjoy through the use of Colitho Plates. We have a collection of these factual stories which you will find packed with valuable ideas. Just use the coupon and you'll receive your copy of the Colitho Idea File promptly.



**Colitho**

THE "ONE-WRITE" WAY TO RUN A BUSINESS

Colitho Division, COLUMBIA RIBBON & CARBON MFG. CO., Inc.  
597 Herb Hill Road, Glen Cove, N. Y.

Okay, rush the Colitho Idea File.

Name \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ Zone \_\_\_\_\_ State \_\_\_\_\_

(Circle 107 for more information)



## tax quiz

### Recent tax court cases

by Benjamin Newman, Tax Attorney, Koenig and Bachner, New York

#### THE QUESTION

*Can estimated future expenses, incurred with relation to producing present income, be deducted from present income?*

#### THE FACTS

Taxpayer was engaged in the furnace business in 1946 and sold a substantial number of furnaces that year. In that year, he charged against the cost of furnaces sold, the sum of \$13,300. He claimed this sum represented a reserve for estimated expenses to be incurred in carrying out a guarantee given with each of the furnaces sold. Taxpayer had guaranteed to turn the furnaces on and off each year for five years. In setting the sales price of each furnace a sum of \$20.00 had been added to cover this

anticipated future service. It was estimated that the cost to Taxpayer of turning each furnace on and off each year for five years would be at the rate of \$2.00 per call.

The Commissioner held that this accrual in one year, of items of future expenses, did not reflect the true income for 1946; that, furthermore, the exact amount of future expenses accruing upon the sale of each furnace could not be ascertained with mathematical certainty.

#### THE RULING

Taxpayer may charge to each year's income reasonably ascertained future expenses necessary to earn, produce, or retain that income, declared the Court. On the facts of this case, the taxpayer's contention is amply supported. A legal liability was created in 1946 when the purchase price for the gas furnaces was paid. The taxpayer, at that time, became obligated to turn the furnaces on and off for the succeeding five years. The cost of such service is reasonably established at a minimum of \$2.00 per

visit. The payment of \$20.00 extra by the purchasers fully proved their intention of calling upon the taxpayer each year for the guaranteed service. These facts authorized the setting up of a reserve out of the 1946 income to enable Taxpayer to meet these established charges in future years. Accordingly, concluded the Court, estimated future expense deduction is valid and must be allowed. (*Schuessler vs. Commissioner of Internal Revenue, U.S. Court of Appeals, Fifth Circuit, decided 3/14/56.*)

#### THE QUESTION

*How do you determine the period of "work" on an invention, to qualify for tax benefits?*

#### THE FACTS

Taxpayer was the inventor of an air flow operated economizer for an aircraft power plant carburetor. Taxpayer claimed an income tax refund based on a claim of work performed on his invention covering a period of 36 months

or more in accordance with the Internal Revenue Code.

The Internal Revenue Code permits an inventor who has worked on his invention 36 months or more to treat the compensation received therefrom, if

MANAGEMENT METHODS



80% of it was received in one year, as if earned pro-rata over the past 36 or more months. Taxpayer had established that in November of 1935, he first thought of the idea for the invention, kept it in his mind, and kept a lookout for available data to determine whether his idea was practical.

In April of 1936, Taxpayer first reduced his idea to writing. It was his contention that he first started work on his invention when the idea came to him in November of 1935 and, accordingly, had worked on it for a period in excess of 36 months.

### THE RULING

Work, in the meaning of the statute, must connote something more than just the germination of an idea or observation of passing data prior to the taking of affirmative action pertaining to the perfection of that idea, stated the Court. When taxpayer made his first rough sketch at a time *less* than 36 months prior to the filing of an application for a patent, he failed to establish a chain of work performed on the invention covering a period of 36 months or more, in accordance with the Internal Revenue Code, concluded the Court. Accordingly, Taxpayer must be denied the right to compute the tax as allowed under the law pertaining to long term compensation. (*Beardsley vs. United States of America*, U. S. District Court, decided, January 14, 1956.)

### THE QUESTION

*Is the profit on the sale of an interest in a joint venture taxable as ordinary income or as a long-term capital gain?*

### THE FACTS

In 1932, Taxpayer and a theatre management corporation entered into a contract. Under the terms of the contract Taxpayer was to manage one of the corporation's theatres, and participate in its profits and losses to the extent of 25%. In 1939, this agreement was renewed and extended to 1952. Modifications of the contract provided that the contract could be terminated on notice and for a cash settlement to the taxpayer. The new contract also



## a new era of typing perfection

### The fabulous new Remington Electric Typewriter!

Herald a new dawn of typing ease and comfort for secretaries and typists as the automatic electric features of this great performer help speedily move mountains of work.

Welcome, too, a new age of *impeccable* correspondence for letter-signing executives. You may choose "your" Executive type style from a variety of type faces, and letterhead-harmonizing colored ribbons

too, for truly perfectly printed correspondence as individual as your signature.

Available in six soft pastel colors, every clean line of this superb machine expresses beauty with a purpose ... it's easily the finest Electric typewriter available. Send for the full-color brochure (RE8811) describing it. Room 1722, 315 Fourth Avenue, New York 10.

**Remington Rand**

DIVISION OF SPERRY RAND CORPORATION

(Circle 134 for more information)

*"But the figures prove it's a genuine antique!"*



This machine is only *six years* old. But compared with others now in general use, it's already obsolete.

Luckily, management at this plant discovered the machine's true age. *Before* the situation could become desperate. How? With Keysort punched-card accounting.

*On time* reports proved that costs on the machine were running at an abnormally high level. And high cost meant high selling price . . . so high that competition was threatening to pull ahead. But as a result

of information supplied by Keysort, a newer, improved machine was purchased. And competition's prices were met — with ample margin for profit.

McBee Keysort can give you *fast, accurate* reports on every phase of factory operation. Whatever your size or set-up. At remarkably low cost.

The trained McBee man near you has a presentation which will show you how it's done. *It will take him just one hour from start to finish.* Phone him, or write us.

**McBEE**



**KEYSORT®**

**Punched-card accounting for any business**

Manufactured exclusively by **The McBee Company, Athens, Ohio** • Division of Royal McBee Corporation  
Offices in principal cities • In Canada: The McBee Company, Ltd., 179 Bartley Drive, Toronto 16, Ontario  
(Circle 125 for more information)

provided that taxpayer was to receive \$35.00 a week plus 25% of the profits, and be liable for 25% of the equipment purchased. A record of payments for equipment was kept, and these amounts were credited to their investment account on the corporation's books.

In 1948, the agreement was terminated, and taxpayer received \$25,000. Taxpayer contended that this sum represented a long-term capital gain from the sale of his interest in a partnership or joint venture with the theatre management corporation. The Commissioner argued that the payment represented the consideration for the termination of an employment contract, and was therefore taxable as ordinary income.

### THE RULING

A corporation has no implied power to form a partnership with an individual, but it could enter a joint venture, stated the Court. The testimony of the taxpayer indicated that a joint venture was intended: Taxpayer was to share in the profits and losses. Taxpayer's salary was nominal, and was intended to cover "out of pocket" expenses, the court decided. Taxpayer's receipt of \$25,000 therefore represented payment for the sale of a capital interest in a joint venture, and accordingly was taxable as a long term capital gain. (*Switow vs. Commissioner, U. S. Tax Court, decided Mar. 16, 1956.*)

### BEST PLACE TO WORK

#### CONTEST

**CLOSES JULY 20th**

**FOR COMPLETE RULES  
AND AN  
OFFICIAL ENTRY BLANK  
SEE  
PAGES 50-51**

MANAGEMENT METHODS



capsule

HUMAN RELATIONS

reports

by Dr. Donald A. Laird, Industrial Psychologist (Formerly head of the Psychology Department at Colgate University, Director of the Colgate Psychological Laboratory, and Director of the Ayer Foundation for Consumer Analysis.)

The grapevine is an organization within the organization. It spreads rumors—and some good solid information, too—across the organization lines. Sometimes the rumors are wishful, other times spiteful. But a lot of the times they convey bonafide information that is useful—and they convey it much faster than the slow-moving official channels of communication.

The grapevine, in view of that, is not always the evil monster that many executives consider it. But it is always a potential danger, since information can be distorted as it is passed along from mouth to ear.

In recent years, social scientists have devised ingenious methods for measuring just how rumors filter up and down the grapevine. These researchers have planted plausible rumors then traced their spread by having undercover agents planted in each clique and organization level in the company.

The following cases demonstrate some of the useful laws of rumor that are being established by scientific eavesdropping. The findings presented will give management a sound basis for deciding on methods to debunk a particular rumor, and for discovering what policies may be responsible for the grapevine growing.

#### Spreading the rumor to improve one's status in the group

When a rumor is confided to you, it may be because the whisperer has the impression you are above him in the group. Rumors were deliberately planted in an office of 55 people, to find out why higher-ups know so much about the sub rosa goings-on inside their work group (1). The employees

were arranged in ranks, from routine workers, to supervisors, to junior executives, to the top man.

The rumors were planted with two innocent employees who did not know it was part of a test. Undercover agents in each level of the group kept track of the progress of the rumors, noting who had told them to whom.

As these rumors spread through the organization, they were repeated mostly to someone in the level above. *Five times as many, for instance, were whis-*

*pered to the boss as to someone bossed.* This strong tendency to relay secret information to one's superiors is looked upon as due to the wish to gain more favorable acceptance by the leaders in the group.

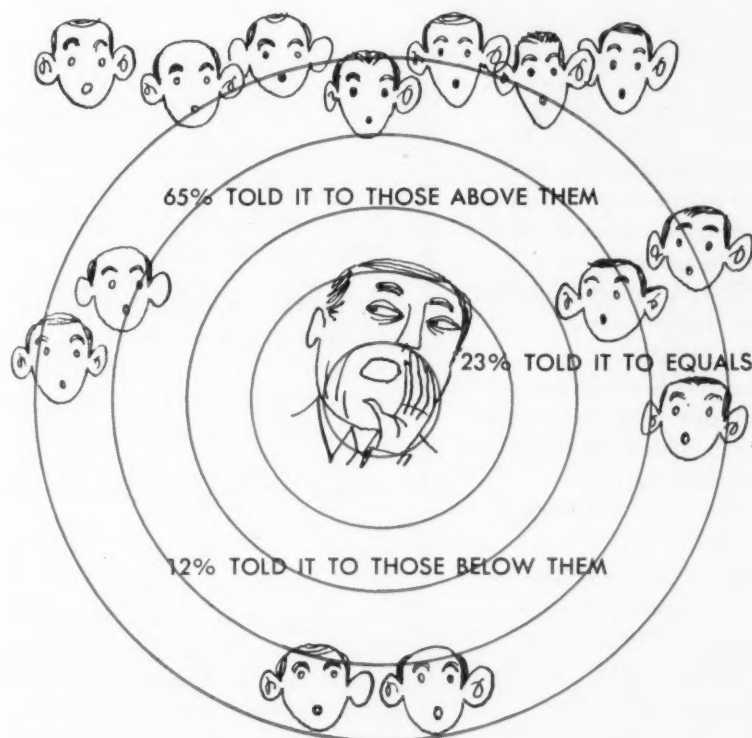
There is a related tendency *not* to tell the higher-ups about rumors that are unfavorable to the higher-ups. Apparently the top executives do not need spies in a group, except to get the sub rosa news that reflects on them personally.

# RUMORS and the executive grapevine

Scientific eavesdropping can help to set a pattern for rumor spreading.

Here are the facts that management should use to control rumors and

make them a distinct aid in executive and employee communication.



Rumors are spread by relatively few executives

The workings of the executive grapevine in a leather goods firm were studied, with 67 executives participating (2). The grapevine transmitted news mostly about company affairs or people. Some news was vital for the executives to know. Some was mere gossip.

When Jones planned to quit his job, no prior public announcement was made. A small number of executives—only seven—spread this news. There were 47 other executives who heard it, but kept it to themselves. The remaining 13 heard nothing.

Those figures are typical of the way a small number of spreaders carried bits of information throughout the organization. On an average, each spreader told it to seven other executives. The coffee break was the peak time for spreading the news. This grapevine worked chiefly during working hours.

Staff men spread more information

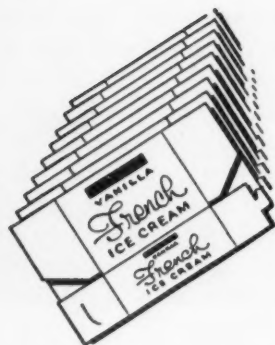


7 EXECUTIVES TOLD 47 • 13 NEVER HEARD IT AT ALL

**This new Imprinter  
saved \$75,000 in cartons  
for ice cream company!**



#1 of a series  
of case studies.



An ice cream manufacturer had a large stock of unusable cartons, printed with names of flavors no longer made... Run through a Pitney-Bowes Package Imprinter, the old flavors were blocked out, new flavors printed. Saving—\$75,000! And with the Imprinter, his regular carton inventory is now reduced by \$15,000!

This amazing new machine also imprints labels, advertising material, dealer literature, etc. It cuts printing costs, reduces inventory, prints only as needed for current production, has innumerable uses—saves time and costs in any operation requiring imprinting.

The PB Package Imprinter gives a good impression on most coated or uncoated paper, board, foil or plastic—at speeds up to 7,500 an hour. Adjustable without tools, it can be run by anybody. Liquid flexographic ink doesn't have to be mixed, dries instantly. Prints from rubber mat or metal type, on a printing area up to 4" by 18". Handles sizes up to 18" by 18", in thicknesses from .010" to 3/16".

Call any PB office for demonstration. Or write for illustrated folder and case studies.

**PITNEY-BOWES  
Imprinting  
Machines**

Made by the originators of the postage meter...  
Service from 272 cities in U. S. and Canada.

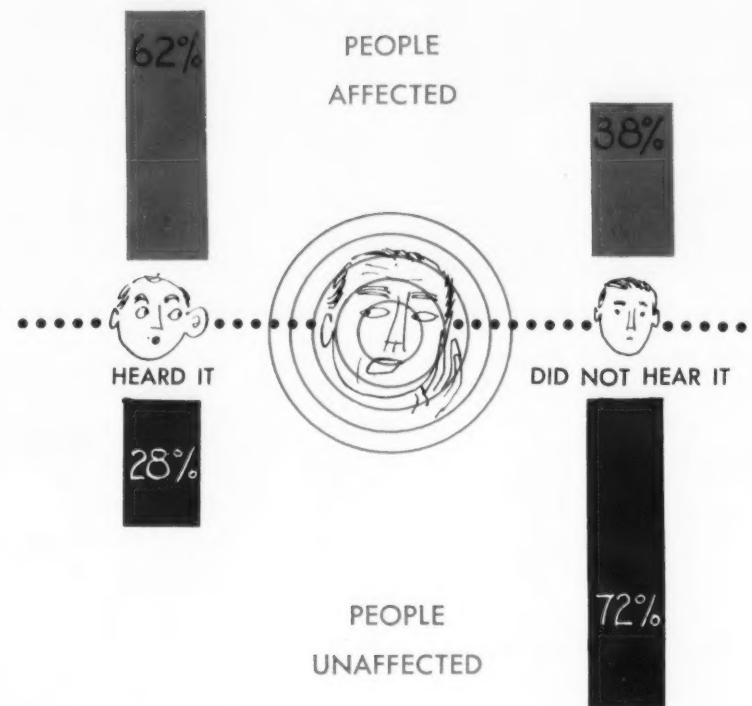
(Circle 132 for more information)

PITNEY-BOWES, INC.,  
4528 Crosby Street  
Stamford, Conn.

Send free illustrated Package Imprinter  
folder and case studies to:

Name \_\_\_\_\_

Address \_\_\_\_\_



than did the line executives. The staff executives move around more and are in touch with what is going on in more departments.

**If a rumor affects you, you'll probably be told**

A rumor is usually passed along "where it will do the most good." Or where it will accomplish some purpose for the group that is most active in spreading it. In a housing project, the rumor spread that a recreation project was a communistic activity (3). Parents who had children who would be affected were about twice as likely to hear the rumor as those who had no direct interest. The rumor was thus told mostly to persons who might be helped by having inside information.

About 25% of the people who passed along this rumor believed it was true. People who *believed* it, spread it more than those who *doubted* it. But none of the passers made an effort to check the truth before telling it to others. Only one-half of the people who heard it, admitted passing it along.

**People distort facts to help them agree with the group**

When people realize they are out-of-step with what others believe, they often "take a second look." In this second look, they neglect some of the

facts, and over-emphasize others, in order to justify changing their minds. Yet, no one asked them to change, or argued with them. Several experiments show that such changes of opinion take place spontaneously with about 1/3 of the people who originally disagreed.

People in groups of 10 to 14 were told the details of a crime case, and each person expressed an opinion about it privately (4). They were then told what the majority opinion had been, but it was a fictitious majority opinion which made most of them out-of-step.

Later, they were all given a chance to change their opinions. They were also asked to write a public report about the crime. The people who switched their opinions also distorted the facts in the report. These distortions were of a sort to justify changing their minds, so they would agree with the announced majority opinion.

The distortion in the private reports shows that they were trying to convince themselves. They wanted to be like the group. The much greater distortion in the public reports reflects more pressure accepted by the group.

**Questionable rumors gain acceptance after one month**

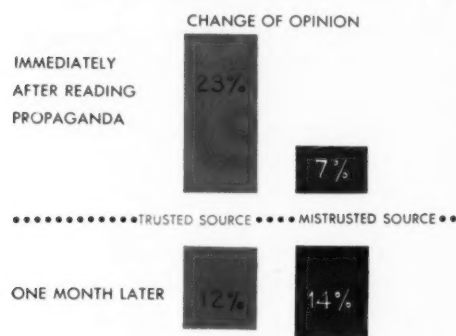
A group of men were given propaganda booklets to read, and tests were later made to find how much their opinions



had been influenced by the reading (5). Some of the material was credited to sources the men considered trustworthy, such as medical journals and authorities on atomic energy. In other booklets, exactly the same material was credited to mistrusted sources, such as a health quack or a Russian newspaper.

Immediately after reading this propaganda, 23% of the men who read from "trusted" sources shifted their opinions to agree with what they had just read. But only 7% of those who read the identical material from "mistrusted" sources had shifted their opinions to agree with propaganda.

Apparently they had their guards up at first, and discounted what they read from sources they looked upon as unreliable. For it was a different story a



month later, when the men's beliefs on the same topics were tested. By that time, their guards were down, and the opinions were about equally influenced by *trusted* (12%) or *mistrusted* (14%).

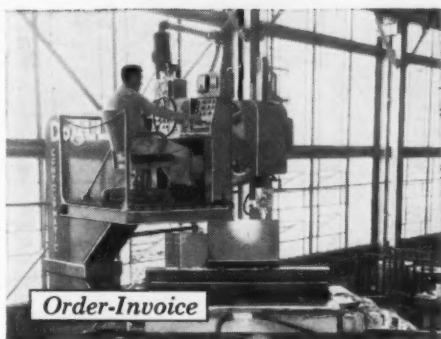
This increasing influence of once suspected rumor is apparently due to the fact that they forgot the source, during the month, but remembered what had been said. This tendency to come around in time to agree with what liars and quacks have said is called *sleeping effect*. Other experiments have shown that when they are reminded later of who said it, they again reject the opinions of the suspected sources.

#### BIBLIOGRAPHY

- (1) Back, K. W., et al: "The methodology of studying rumor transmission," Human Relations magazine, 1950, Vol. 3, pp. 307-312.
- (2) Davis, K.: "A method of studying communication patterns in organizations," Personnel Psychology, 1953, Vol. 6, pp. 301-312.
- (3) Festinger, L., et al: "Social Pressures in Informal Groups," New York: Harper & Bros., 1950.
- (4) Raven, B. H.: "Group pressure toward the selection and distortion of content in communication and cognition," American Psychologist, 1953, Vol. 8, pp. 420.
- (5) Hovland, C. I., et al: "Communication and Persuasion," New Haven: Yale University Press, 1953.

JULY 1956

## Three Enterprising Companies Show How You Can... Eliminate a Big Expense in Major Business Operations...



The DeAll Company, world's largest manufacturer of band machines, uses the Copyflex one-writing method to speed and simplify order-invoice paperwork, cut shipping time to customers by 50%. Installed in 35 branch outlets, Copyflex eliminates manual copying, saves \$100,000 annually in clerical work.



A. O. Smith Corporation, one of America's largest manufacturers of steel fabricated products, uses Copyflex in its Milwaukee plant to produce receiving reports directly from purchase orders. This eliminates slow, costly retyping of basic data, avoids discrepancies between purchase orders and receiving reports.



The Best Foods, Inc., famed for its "family of quality products," uses Copyflex to speed and simplify accounting paperwork. New entries are posted on originals of cumulative reports, and copies are mechanically reproduced by Copyflex without the expense, loss of time, or inaccuracies of manual copying.



## With Revolutionary Copyflex One-Writing Method!

Everywhere, alert firms like those described here are simplifying and speeding everyday business operations with the revolutionary one-writing method made possible by modern Copyflex copying machines. You surely can, too!

With Copyflex, you write basic information only once—the entire series of varied copies needed to complete any systematized business operation are mechanically reproduced from the original. You eliminate the big cost and delay for retyping or rewriting constant information from one form to another. This frees personnel for other important work, gives you tighter control of operations, saves thousands of dollars.

Copyflex machines are clean, odorless, economical — letter-size copies cost less than a penny each for materials. Copyflex will fit readily into your present systems. Mail coupon today — it can mean important savings of time and money for you!

**BRUNING**  
Specialists in  
Copying Since 1897  
Copies anything typed,  
written, printed or drawn  
on ordinary translucent  
paper — in seconds.

CHARLES BRUNING COMPANY, INC., 4700 MONTROSE AVE., CHICAGO 41, ILLINOIS  
In Canada: Charles Bruning Company (Canada) Ltd.,  
105 Church St., Toronto 1, Ont.

Charles Bruning Company, Inc., Dept. 72-F  
4700 Montrose Ave., Chicago 41, Illinois

Please send me information on the Copyflex process and machines.

Name \_\_\_\_\_ Title \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ County \_\_\_\_\_ State \_\_\_\_\_

(Circle 104 for more information)

DEPENDABLE is the watchword...

You can depend on ADDO-X to perform the thousand and one adding, subtracting and multiplication jobs each day with amazing speed,\* quietness and smooth operation.

Operators are more relaxed, more efficient, more productive on ADDO-X machines. The STEP-O-MATIC lever offers calculator performance when multiplying. Write for descriptive literature† today.



\*At 175 r.p.m.

†Also on our NEW two register machine.



### **ADDO MACHINE COMPANY, INC.**

145 WEST 57TH STREET, NEW YORK 19, N. Y., CIRCLE 5-6940

#### **WEST COAST BRANCH**

WESTERN ADDO MACHINE CORP., 2921 BEVERLY BLVD.  
LOS ANGELES, CALIFORNIA, TEL: DUNKIRK 5-2247

For further details mail this advertisement with your letterhead.

(Circle 100 for more information)

capsule

BOOKS FOR MANAGEMENT

reports

#### **Electronic Data Processing for Business and Industry**

Three objects guide the author's hand in this book. First, the book is directed toward management's understanding of the principles of electronic data processing equipment. The idea being that once the major "patterns" of these systems are explained, the executive will be in a better position to evaluate them.

The next major point of the book is developing a method by which the specific requirements of a company can be determined. The last point entails the integration of the first two points and then an examination of the current commercial electronic systems, to determine which is the most suitable for each individual firm.

RICHARD G. CANNING, *John Wiley & Sons, Inc., 440 4th Ave., New York 16, N.Y.*  
332 Pages. \$7.00.

#### **Business Budgeting and Control**

Budgeting, as applied to business, must adapt to new conditions in order to continue serving as a powerful management tool. For this reason, the authors have seen fit to write this second edition of a book considered to be a standard work in the field of budgeting. Aimed primarily at accounting students and financial management executives, it is also useful for medium and smaller sized companies in need of better budgeting procedures. The book is divided into two parts, the first surveying the purpose of budgeting, both for management and the accountant, and the second part examining the structure of a budget.

J. BROOKS HECKERT, JAMES D. WILSON, *The Ronald Press Company, 15 E. 26th St., New York 10, N. Y.* 442 Pages. \$6.75.

MANAGEMENT METHODS



# How to formulate a policy for Executive Transfer

Though it may be just a switch of a pin on the organization chart, transferring an executive to a new post in a new location can be a "big deal" policywise. The company is expected to pay the moving costs, but that's when problems arise. "What are the legitimate costs, and how should they be paid? To get the answers, MANAGEMENT METHODS has asked a number of companies to outline their present policies on executive transfer. They are presented here as "guideposts" to those seeking to compare their own policies or to formulate better ones.

Obviously, management cannot say casually to a Boston executive, "We need you out in San Francisco by the 15th of next month," and expect the man to pull up stakes, shoulder the burden of expense, and get his family and possessions comfortably resettled over one week-end.

There has been a substantial increase in executive transfers in recent years. Decentralization and mergers are the primary causes. Decentralization led to an increase in multi-plant operations, and the merger wave has led to the exchange of management experts on an inter-plant basis.

To deal with the problem, a new set of specific management policies was needed. The company had to find out the best way to compensate for the costs, and how far it should go in meeting the costs, all without evoking, "I'm not moving anywhere, I quit" from the switched executive.

How does your company compare with your competitors in providing

## About the survey

A representative sample of companies was queried in this survey. They cover the six basic industries, Food and Allied, Textiles and Allied, Electrical, Paper and Chemicals, Metal, and Miscellaneous, including many of the service industries. Each of these six categories was divided into six separate groups, a large, medium, and small company representing both the Northeastern industrial core, and, in another group, the remaining portions of the country.

	LARGE (Over 1000 Employees)						MEDIUM (500-1000 Employees)						SMALL (250-500 Employees)					
Make up loss on sale of house																		
Pay for household goods transfer	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Pay family transportation costs	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Pay for home-hunting trip	•	•		•		•	•				•	•				•	•	
Loan funds for house purchase											•					•		
Pay all closing costs	•															•	•	
Assure financial obligations																		
Time off	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Pay temporary living expenses	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

## Q. Is there any difference between small and big company policies in transferring executives.

A. Not according to the survey. The similarity of the practices across the board is remarkable. Look at Figure 1. Each spot marked off refers to one key characteristic of policy. Yet each of the companies represented ranges in size from more than 50,000 to only 250 employees.

## Q. Is there a need for formal policy?

A. Not at all. Nearly all the companies responding do not have formal written policies, but the kind and degree of compensation for executive transfer is well understood.

## Q. Is there a one best way, a most successful formula, for paying these costs equitably?

A. Not according to the survey. The procedures for each key payment area vary substantially. For example, here are four different methods for paying temporary living costs at the new location: (1) One month's salary; (2) Until permanent quarters are found; (3) Within bounds predetermined in each case; (4) One week's cost.

## Q. In the policy areas surveyed, are there any specific recommendations or practices which you discovered to be unique?

A. Several. Of course, every company should be free to decide just where it has an obligation and how to discharge it best according to the corporate conscience. One of these practices dealt with assuming employee financial obligations.

## Q. Well, how did the respondents react? Should the company directly involve itself in the financial transactions of the transferred employee?

A. Apparently not. The survey revealed almost a universal taboo when it came to this question. None of the responding companies were disposed to assume this obligation. For example, one survey question dealt with assuring mortgages or bank loans necessary for the employee to purchase homes (this appears on the seventh horizontal line of Figure 1). None of the respondents answered in the affirmative. Only two companies said they loaned funds for the purchase of a new house.

## Q. Did the survey disclose any controversial policy, one in which respondents tended to evenly divide in their answers?

A. Yes. The respondents split almost right down the middle on the payment of house hunting expenses. These expenses include trips to the new location for husband and wife, car rentals and newspaper advertisements. However, some of this covered in the last two questions dealing with time off for locating new house and payment of temporary living costs. Since almost all companies compensate in these two areas, those that don't provide for house hunting expenses aren't necessarily unconcerned with the problem.

## Q. What about policies for blue collar workers? Should the company make policies only for executives and drop benefits when it comes to other workers?

A. It doesn't appear to be necessary. Most companies report that there is little transfer of other than executive or professional technical workers. To place any sort of unnecessary restriction might cause a useless irritation of rank and file workers. Probably the only occasion for transferring the blue collar worker would be in the shifting of a complete plant. In these cases, a unique set of arrangements is required.

adequate compensation? A check list of the most important areas of the problem, and the most pertinent questions dealing with them, is detailed in Figure 1. Check your answers against those we found in our survey to be generally accepted. It should give you a rough yardstick for dealing with your next executive change.

To get an even clearer picture of how these policies operate, here are brief case history accounts of three typical companies, their policies, and their mode of compensation.

### The Large Company

One of the nation's most important corporate enterprises, this diversified company maintains a number of plants around the country. It manufactures a variety of products and employs a large number of scientific workers. One of the pioneers in the use of management development programs, it annually shifts many management trainees to different plants for training. This, plus the shifting of technological experts, added to routine executive transfers, greatly increases the applications of the transfer policy.

The basic concept of this transfer policy is contained in the company's statement that the company will pay "all" of the costs of moving. However, it goes on to explain that the transfer policy applies only to management and professional employees.

Though there is no formal written transfer policy, there are definite rules for procedure. The company pays for transfer of household goods, the transportation costs for the family, house hunting trips for the employee at the site of his new location, time off for settling in his new residence, and temporary living expenses there. Their liberalness is exemplified by the full month's salary paid as additional compensation to meet incidental expenses.

The corporation avoids any direct financial aid, such as making up loss on the sale of the old house, the loan of funds, and assuming any responsibility in assuring loans and mortgages. The company does, however, pay closing costs on the sale of the old house and purchase of the new one.

### The Medium Sized Company

This company was in the headlines

# HOW AUTOMATION CAN PAY FOR

**Big Business** is turning to automatic processing of data and automatic transmission to secure greater speed, efficiency, business control and accuracy in making decisions that are important to its operation.



**Small Business** has the same need for automation's new benefits. The Moore man applies principles of ADP to give every business maximum data processing benefits with the investment tailored to the budget.



The immediate benefits of planning for automation in office procedures are the results of the systems approach... the design of a straight-line work flow that provides for accurate, speedy processing of data. For the larger corporation, such procedure analysis may only correct a simple routine which proved to have been the bottleneck of the entire operation. For the smaller company it may involve a complete integrated system from order-taking to management analysis or any other procedures needed.

Moore manufactures forms only, and

not ADP machines. For that reason it approaches a systems problem with an open mind. It considers the automation required... and plans the correct forms and constructions so that an entire system is integrated for efficiency and economy.

When a business gets just the automation it needs to do its work better, excessive investment is not called for. The system fits the purpose and the purse, and introduces benefits on a pay-for-itself basis. Calling the Moore man can be the first step in this process.

*Distance is no disadvantage when ADP shortens the time lag of an order. By cutting 'travel time' between receipt of an order and its entry at the warehouse, ADP improves customer service and speeds operations connected with shipping, invoicing and tabulating sales analyses.*

SEE CASE HISTORY ON FACING PAGE ►

(Circle 124 for more information)

MANAGEMENT METHODS

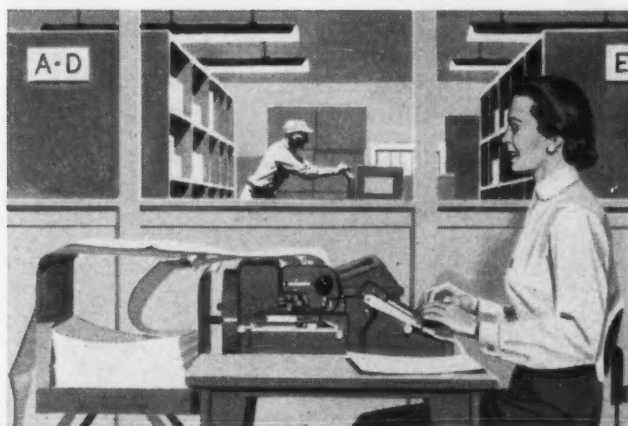


# ITSELF WITH MOORE'S A D P\*

\*Automated Data Processing



**SALES OFFICE** The customer order is entered on a Moore 3-part form. One part serves as an acknowledgment, and is sent to the customer. A by-product of this typing is a tape that transmits information to the warehouse by wire.



**WAREHOUSE** The incoming wire furnishes order information, and Jeanine uses it to prepare a Moore 5-part form, containing shipping data and advices. Jeanine also cuts a tape, a by-product of her typing, with invoice information on it.



**INVOICING** The tape Jeanine prepared is used by Grace, back in Billing Dept., to prepare customer invoices. Grace also cuts a tape, simultaneously, and this contains selective information for tabulating and sales analysis.



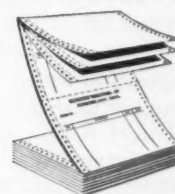
**STATISTICS** The small company may turn over its selective tapes to service bureaus, where they're converted to punched cards for tabulating into sales summaries. Many large concerns are equipped to do this work on their own premises.

## Moore forms are the heart of the system

...they deliver the A D P benefits

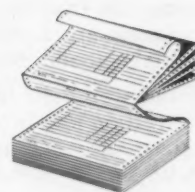
Speed and accuracy are built into a system like this—with the warehouse getting instructions the same day the order is received. Delays are eliminated, and so are the nuisance and negative results caused by transcribing errors. Invoices go out systematically with speed, and

sales analyses are prepared rapidly for up-to-the-minute reports on inventory conditions. Any company, large or small, can enjoy practical ADP benefits, like those above, just by calling in the Moore man. He's in the Classified or can be reached by writing the Moore office nearest, below.



The 3-part  
Moore  
continuous  
form

Another  
Moore  
continuous  
form used



## MOORE BUSINESS FORMS Inc

NIAGARA FALLS, N.Y. • DENTON, TEXAS • EMERYVILLE, CALIFORNIA

Since 1882 the world's largest manufacturer of business forms and systems. Over 300 offices and factories across U. S. and Canada.

(Circle 124 for more information)

several years ago when labor trouble forced a "crash move" from New York to a Southern city. The company manufactures a single line of consumer products. Since moving South, they have continued operations with considerable success.

In response to our questionnaire, two sets of answers were given, one for normal transfers, and one which was devised to cover the original "crash move."

The regular policy now in effect is not unusual. It is highlighted by the company's firm announcement that "all levels of employee personnel are treated equally if the move is made at the request of the company." The company also has formalized its transfer policy into a personnel manual. The final distinguishing feature is that although the company will not pay closing costs on the sale of the old house and purchase of a new one, they will make constructive recommendations to the employee.

A so-called "crash move" is unique. Not many companies will ever make such a move, but if the necessity ever arises, the policies drafted by this company could serve as a useful guide. Naturally, the policy applies to all personnel, and another obvious conclusion is that such a move is expensive. For example, this company agreed to make up the losses incurred by all its employees in the sale of their New York houses. They paid for transfer of household goods, the family, and one family trip to the new location for house hunting. In addition, a home closing trip was paid for, if such was necessary.

The company agreed to loan funds to the employee for the purchase of a new house based on a compensation formula. All closing costs on the sale of the old house and the purchase of a new one were paid by the company.

A first mortgage was made available to all employees through an outside source. All the time needed in locating the new house and settling the family was provided. All hotel, meals and transportation costs for temporary quarters were provided, as well as funds for any recognized unusual expenses in the move.

The policy, in effect, provided the employee with all the time and money he needed to make the move. Of course,



## THE MIGHTIEST LITTLE WORKHORSE IN BUSINESS

The Comptometer doesn't do every figure job business calls for. But it does so many jobs so much better, it is in demand practically everywhere. That's the reason Comptometer has accumulated more business experience and more office seniority than any other adding-calculating machine.

Operators like the operating ease and, from results, bosses can't help rating its efficiency high. Inventive engineers gave Comptometer Floating

Touch, a synonym for operation without fatigue. Through another Comptometer first known as Direct Action, answers appear instantly in large readable figures. The machine is unfailingly accurate. In case the operator does slip, signals are flashed to the senses—via sight, sound, touch.

Whether this wondrous little workhorse can do certain jobs in your office better is something you may want to work out with the Comptometer rep-

resentative. If you'd like a demonstration on your work, call him in. He's in the Yellow Pages, or send the coupon.



**FELT & TARRANT Mfg. Co.**  
1734 North Paulina St., Chicago 22, Illinois

Gentlemen: Without cost or obligation—  
☐ I want more information about the new Comptometer  
☐ Please arrange an office demonstration  
☐ Please arrange for a free office trial

Name \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ Zone \_\_\_\_\_ State \_\_\_\_\_

Other products: COMPTOMETER® DICTATION MACHINE;  
10-Key COMPTOGRAPH® CALCULATING-ADDING MACHINE.  
Offices in principal cities and throughout the world.

**COMPTOMETER®**

(Circle 114 for more information)

the policy kept strict reins on the employee to insure that all compensations were legitimately incurred.

### The Small Company

This midwestern manufacturer of scientific testing equipment has constructed a policy which is "definite with respect to direct expenses, but flexible with respect to related costs." The flexibility is a necessity because each case of transfer is considered separately.

The policy is geared to accommodate any level of employee. Characteristic of management's attitude is the fact that ordinarily it does not make up losses on the sale of the old house, although in special "hardship" cases, expenses or losses suffered by the employee due to the move are paid.

The company pays all the cost for transfer of household goods, the family, and one house-hunting trip which includes the wife. Though it will not loan funds nor assure financial obligations, the company will pay for the closing costs on the sale of the old house and purchase of the new one.

About one week is the limit on time for locating a new house and settling the old. The company will also pay one week's temporary living expenses in the new location.

The company does not have a formal written policy to handle the transfer of employees, but the expression of policy in answer to the questionnaire indicates a carefully constructed system for handling all situations. m/m

## BEST PLACE TO WORK AWARDS



CONTEST CLOSING JULY 20th

Complete entry blank and rules on pages 50 and 51.

MANAGEMENT METHODS



# How to lick the engineer shortage

**Don't waste your engineers by putting them in the wrong engineering job.**

**Learn the difference in capacities of men and then place them in the job types**

**for which they are best suited. This creates more efficiency and greater stability.**

**EDITOR'S NOTE:** This is the first of two articles dealing with practical measures an employer can take right now to ease his engineer shortage. This first article is based on a study now being conducted by the Educational Testing Service of Princeton, New Jersey. Although this project is incomplete, the results obtained so far lead the researchers to several definite conclusions. The appearance of these results in **MANAGEMENT METHODS** marks their first public disclosure.

Everybody is looking for engineers. The technical journals are full of enticing appeals. A recent issue of *Electronics*, for example, carried 50 full pages of employment ads. The Sunday newspapers consistently have columns of display ads. Scott Paper Company recently devoted its commercial time on the *Omnibus* TV show to recruiting. Each spring, trained

drum-beaters ride the engineering school circuit to lure the top undergraduates into their firms. Never before has so much money been spent on hiring an engineer, nor so much money offered as starting salaries.

Yet how much of this hurly-burly is actually to fill *new* jobs? Our expanding economy has caused an increased demand for engineering talent. But an important demand is based on too rapid a turn-over, a shifting of men from one field to another.

## Job dissatisfaction

Money is an important reason for this job shifting. Fringe benefits are important. But it is job dissatisfaction that is perhaps the most important factor. Management recognizes this fact,

as witness the catch phrases in the recruiting ads: "Nuclear Careers" "Professional reputations are to be won" "a dynamic program—geared to tomorrow" "where creative assignments are the order of the day" "these challenging assignments are waiting for you."

But are these *more* than catch phrases to lure the engineer to another company? Has he any better chance of finding job satisfaction? The answer is *probably not*. Most companies, unfortunately, do not realize that there are differences, not only in engineering jobs, but in engineers as well. Unless these peculiarities are matched properly, job satisfaction will be difficult, if not impossible, to achieve. Obviously, the first thing needed to solve the shortage by reducing turnover is job satisfaction for engineers. (Next page, please)

**FIGURE 1: SUMMARY OF PRELIMINARY STUDY FINDINGS**

TYPE OF ENGINEER	WHAT HE DOES	WHAT HE IS LIKE
I: Research	Develops and tests hypotheses or generalizations; originates and evaluates ideas; makes decisions from data.	High in quantitative and inductive reasoning; interested in ideas and theory; tolerant of complexity and uncertainty; self-critical; combines creative spark with common sense.
II: Application	Evaluates performance of materials, designs, methods, processes, products, equipment, etc.; keeps informed of new ones.	Much like the researcher, but not as extreme; greater interest in things and less in theory.
III: Design	Makes preliminary sketches, detailed drawings, and complex calculations; plans best use of materials.	Not enough data for good description.
IV: Product	Writes manuals, specifications, proposals; keeps records, does some trouble-shooting.	A 'typical' engineer; practical; interested in things and people.
V: Operations	Does staff work involving versatile application of engineering principles in a variety of activities.	He needs all the good qualities, except possibly one unique for research; interested in people, things, and economic matters; tends to look ahead.
VI: Supervision	Controls expenses; plans use of personnel; develops people towards promotion.	Very much interested in people; pays a good deal of attention to the future in making decisions; is creative in dealing with people.
VII: Sales	Conducts negotiations; sells ideas to people.	High in talkativeness, impulsiveness; great interest in economic matters and in status aspiration; not too concerned with theory.



MR. M. S. DELAVAN, Controller  
Alexander Smith, Inc., Carpets & Rugs  
Greenville, Mississippi

## Alexander Smith salesmen like Traveletter System



"I am glad to report that the *Traveletter* System seems to be working very well. We have been able to obtain a monthly distribution of all our traveling expenses, reductions in travel advances, leased car rentals and reimbursable maintenance expenses on the leased cars.

"In addition, we have a weekly report showing the status of each man's account.

"I believe that our men are happy with the arrangement."

The *Traveletter* System reduces cash advances, saves accounting time, prevents lost time and lost orders, builds morale of salesmen.

Used by companies employing from 1 to 1,000 travelers, including United Aircraft Corporation, American Cyanamid Co., Western Electric Co., and many others.

## Traveletter

... the better system for handling travel expenses.

*Descriptive Brochure on Request*

**TRAVELETTER CORPORATION**  
GREENWICH 4, CONNECTICUT  
(Circle 141 for more information)

# **control your production costs**

## *Automatically*



You can keep costs in line on your production line, economically and accurately with Calculagraph—the dependable job time recorder that computes, prints and records ELAPSED time automatically. There's no need for costly manual error-producing methods when Calculagraph can do it automatically and systematically for you.

Ask our representative to show you how  
Calculagraph can control your production costs.  
You'll be glad you did.

Write for catalog to Dept. M

Agents in Principal Cities

# **CALCULAGRAPH**

## *Company*

HARRISON, N. J.

THE STANDARD OF ACCURACY SINCE 1892  
(Circle 106 for more information)

### **Engineer utilization study**

The Education Testing Service of Princeton, New Jersey, has initiated a study of the engineer, his characteristics, and duties. The study, directed by Dr. David Saunders, was suggested by the Selection and Guidance Committee of the American Society for Engineering Education. It is supported by leading employers of engineers: American Telephone and Telegraph (including Bell Telephone Laboratories, Western Electric and several operating telephone companies), Detroit Edison, B. F. Goodrich, International Business Machines and Westinghouse Electric. Recently, Sandia Corporation joined the list of participants.

The main object of the study is to develop a method for channeling the abilities of young engineers into the most productive and satisfactory branch of engineering. The work, started in the middle of 1954, is expected to continue for at least two more years, at which time a final report will be released. A battery of tests is planned for senior engineering students early in the school year. But a definition of the types of engineering jobs was needed before any battery could be developed.

Although many employers had recognized differences among engineering assignments, they had not necessarily recognized individual differences in men. They usually held the theory that *an engineer is an engineer is an engineer*. If you want a chemical engineer, you find a man with a degree in chemical engineering, near the top of his class and from the best available school, and persuade him to join your company. When he arrives, you assign him to the vacancy he seems to prefer.

This is not the way to go about it, according to the ETS study. There are differences in both jobs and men and, unless you put the right man in the right spot, you will get either mediocre performance or thorough dissatisfaction, both leading to turnover.

### **Job types and titles**

There are not an unlimited number of different types of jobs. Titles are almost innumerable, and each company has its list and its hierarchy of job names. Actually, these names bear very

little relationship to what the man actually does, and what qualities he should possess.

A development engineer at IBM does a different job than a development engineer at Westinghouse. On the other hand, the latter is just about the same as a man whom the Bell System calls a manufacturing engineer. Westinghouse has manufacturing engineers, too; but they are different from Bell's.

There are seven different types of engineering positions, according to the preliminary findings of the ETS study. With the multiplicity of names used, it is difficult to find a good, short title for each of the types. However, without prejudice the seven titles below are as simplified as possible:

I: Research	}	technical
II: Application		
III: Design		
IV: Product		
V: Operations	}	administrative
VI: Supervision		
VII: Sales	}	sales

The list was developed from a thorough analysis of what an engineer does, how he spends his time, and what characteristics are demanded.

The first step in developing the classifications system was to draw a complete list of things that engineers do. After field testing, it became apparent that many of the entries were simply different ways of saying the same thing. The list was boiled down to 24 items, as shown in Figure 2.

This list formed the basis of the Key Group Data Form, which was sent out to men who supervised engineers. They were asked to fill out one form for each job title under their jurisdiction. If two men with the same title did substantially different work, a separate sheet was filled out for each. To the left of each item, the supervisor was asked to estimate the percentage of time it occupied. On the right, he ranked them, from one to 24, on the basis of how crucial it is for members of this group to perform these activities adequately. For the ranking, the men were warned to pay no attention to the actual time spent on a task, nor how hard it may be to find somebody who is able to perform it.



%	ACTIVITY	RANK	LETTER
_____	(A) Completing experimental or pilot projects	1	(most crucial)
_____	(B) Conducting negotiations	2	(next most crucial)
_____	(C) Controlling expenses	3	_____
_____	(D) Developing and testing useful hypotheses or generalizations	4	_____
_____	(E) Developing and/or maintaining technical records	5	_____
_____	(F) Developing people toward promotion	6	_____
_____	(G) Estimating budgets, costs, or prices	7	_____
_____	(H) Evaluating ideas	8	_____
_____	(I) Evaluating performance of present materials, designs, methods, processes, products, equipment	9	_____
_____	(J) Keeping informed of improved materials, designs, methods, processes, products, equipment	10	_____
_____	(K) Making and/or checking complex calculations	11	_____
_____	(L) Making decisions on the basis of data	12	_____
_____	(M) Making detailed drawings	13	_____
_____	(N) Making preliminary sketches	14	_____
_____	(O) Non-routine assembling of equipment	15	_____
_____	(P) Originating technical ideas	16	_____
_____	(Q) Participating in technical society or community activities	17	_____
_____	(R) Planning best use of equipment or materials	18	_____
_____	(S) Planning best use of personnel	19	_____
_____	(T) Preparing and making technical recommendations or proposals	20	_____
_____	(U) Selling ideas to people	21	_____
_____	(V) Sizing-up people	22	_____
_____	(W) Trouble shooting and/or meeting emergencies	23	(next least crucial)
_____	(X) Writing technical articles, correspondence, instructions, manuals, patent disclosures, reports, specifications	24	(least crucial)

FIGURE 2. The respondent lists functions of engineer by importance and job time.

### Portrait of the engineer

From the Data Forms received to date, seven clusters of jobs have emerged, distinguished by what the engineers actually did and what was crucial about their role in the plant. In a preliminary report, not yet generally released, Dr. Saunders has given descriptions of the seven groups:

"The most distinctive characteristic of the **research engineer** is that he engages in developing and testing useful hypotheses or generalizations. It is also important that he originate technical ideas, although this is an activity which is shared, in decreasing amounts, by application, design, and product engineers. The evaluation of ideas and the making of decisions on the basis of data are also judged to be important for the research engineer, but these activities are important for almost all engineers.

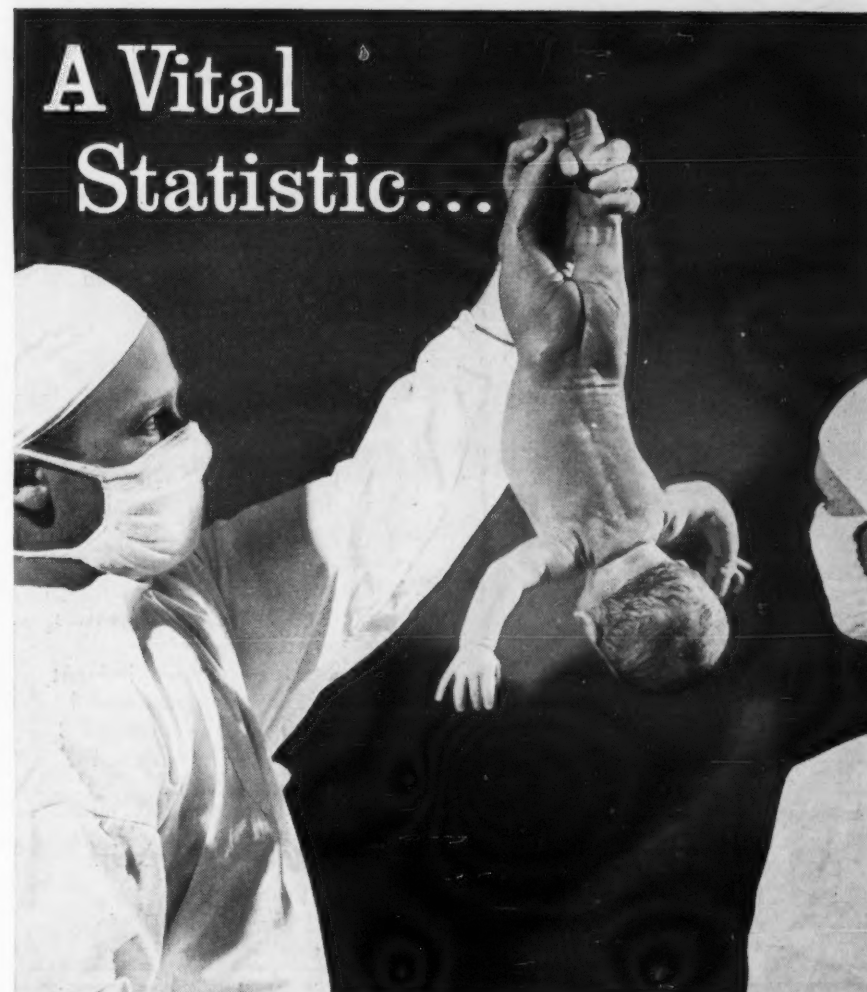
"**Application engineers** are very much like research engineers. However, it is somewhat less important for them to work with theory or to originate technical ideas and somewhat more important for them to evaluate the present performance of their materials, designs, methods, processes, equipment, etc., and keep informed of new ones. Both research and application engineers are involved to about the same extent in experimental or pilot projects.

"**Design engineers** constitute the third group within technical engineering. Although only one of the 24 (job titles) included in this study can be categorized here, there is no doubt that it forms a separate group. The job description of the design engineer emphasizes the making of preliminary sketches and detailed drawings, along with planning the best use of materials and making and checking complex calculations.

"**Product engineers** are the fourth group under technical engineering. This group seems to be mainly characterized by the amount of writing it does. This apparently includes primarily manuals and specifications, along with the preparation of technical recommendations or proposals and the development and maintenance of technical records. Product engineers also get involved in trouble-shooting."

(These four groups are all within the general heading of technical engineering, and they are not very much different, one from the other. It is more a matter of degree than of variation in characteristics. The four groups have one interesting factor in common—*none of them place primary emphasis on activities related to working with people or with money.*)

(Next page, please)



## recorded by Filmsort!

### The System that Activates Microfilmed Records...

BIRTHS, marriages, deaths — all the vital records pertaining to the entire population of one of our Eastern states are recorded on microfilm, mounted in Filmsort Aperture cards. These are documents which must be part of a permanent, yet easily accessible file, incorporated in this most modern of records systems.

The actual record in this vital statistics application is filmed on 35mm microfilm. The film is then permanently mounted into electric accounting machine

cards processed by Filmsort. Identifying data is punched into the cards so that they can be machine sorted and any given document located in seconds. This system of combining the actual record in film form with the means of locating that record, achieves both condensation of the files and complete accessibility.

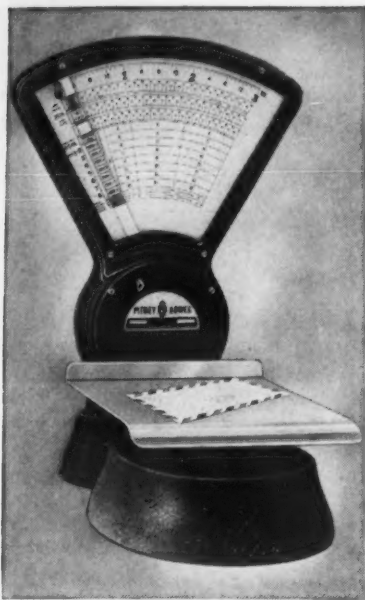
The Filmsort system as applied to vital statistics records is simply one variation of a completely versatile method for the mechanized handling of active, large volume records. For engineering drawings, personnel records, hospital case histories — any active records needs — Filmsort offers the means of providing the space economy of microfilm combined with standard card filing systems.

Unitized Microfilm Equipment—Supplies—plus Service



FILMSORT DIVISION  
DEXTER FOLDER COMPANY  
Pearl River, New York

(Circle 115 for more information)



**FREE:** Handy desk or wall chart of Postal Rates, with parcel post map and zone finder.



## PITNEY-BOWES Mailing Scales

PITNEY-BOWES, INC., 4585 Walnut St., Stamford, Conn.

Made by the originators of the postage meter . . . offices in 94 cities in U.S. and Canada.

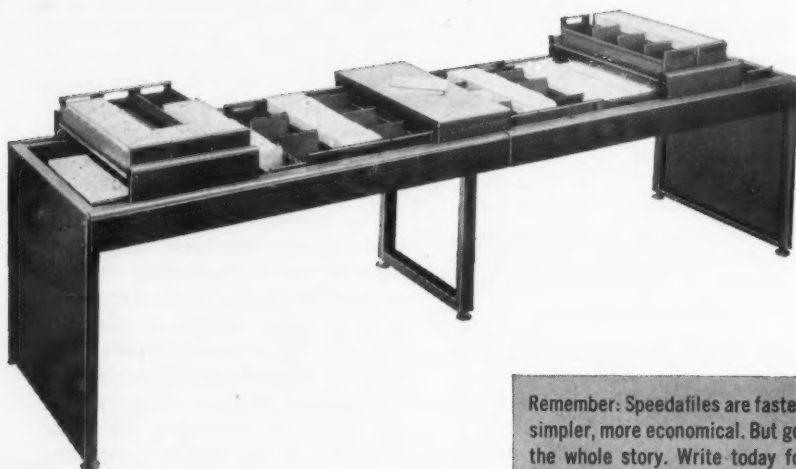
(Circle 131 for more information)

## \$1 saved every day!

- An inaccurate, run-down mail scale can lose a dollar a day in postage, even in a small office. Means up in a year!
- A PB precision-made scale can save that \$1 a day in wasted postage. And often prevents letters going out with insufficient postage. "Postage Due" is bad advertising!
- With its automatic pendulum mechanism, a PB scale is accurate for keeps! Registers instantly. And large, widely spaced markings can be read instantly. Saves time as well as postage.
- PB scales for every requirement—including a parcel post model up to 70 lbs. Ask the nearest PB office to show you. Or write for free illustrated booklet.

## INSTANT CARD RECORD AVAILABILITY

The fastest reference is direct from operator to card with SPEED-AFILE—the simplest, most economical active card reference or record file.



Remember: Speedafiles are faster, simpler, more economical. But get the whole story. Write today for illustrated literature.

**TAB**  
PRODUCTS CO.

57 Post St., San Francisco 4

Now, with MOBILE TRAY CARRIER, shown above at left and right, thousands of additional cards are instantly available to operator in the same floor space. Capacity increases as much as 60%. Optional CENTER LEG enables you to join, as shown in photo, two or more Speedafiles in one operating unit.

(Circle 140 for more information)

"Under the major head of administrative engineering the first group is **operations engineering**. There does not seem to be any activity which is uniquely important for this group. This group seems to be engaged in staff work, requiring the versatile application of engineering principles in a variety of activities. These engineers must consider the job to be done with the equipment available, and determine the most effective combinations.

"The other group under the major head of administrative engineering is labeled **supervision**. The men in this area seem to have line responsibility, along with several unique supervisory functions. Thus, they are mainly responsible for the control of expenses, for planning the best use of personnel, and for developing people toward promotion. To the extent that a normal sequence of promotions will alternate line and staff assignments, the distinction between the two sorts of administrative engineering may not be of great practical significance.

"The seventh group that emerges from the results is labeled **sales engineering**. This is the group which is uniquely responsible for conducting negotiations. As would be expected, another important activity is selling ideas to people, but this is also an important activity in administrative engineering."

The activities of engineers seem to cluster around five groups, and any job can be described in terms of its degrees of dependence on these clusters. As currently defined, the five clusters are as follows:

- A: Employs basic scientific skills.**
- B: Applies developed technical information to current problems.**
- C: Provides various supportive technical services to ongoing activities of engineers.**
- D: Prepares detailed plans for future use.**
- E: Employs human-relations, accounting and, perhaps, other non-technical skills.**

The relationship between the seven types of engineers and these five factors are indicated below:

TYPE	FACTOR				
	A	B	C	D	E
I:	X				
II:	X	X			
III:				X	
IV:	X		X		
V:		X	X	X	X
VI:					X
VII:		X			X

The heavy X's represent those factors of greater importance.

Although MANAGEMENT METHODS has been permitted to reproduce the Data Form itself, release of the rankings must await the completion of the study. It is then expected that a step-by-step technique will be available to permit management personnel to classify all engineering jobs within their company. The above descriptions, in the meantime, should help in getting a better understanding of the direction of the study, as well as its potential application in any particular plant.

### Measuring the man

Setting up these seven types was only the first phase of the study. It proved little, but it gave the research team material on which to work. Admittedly, different jobs had different requirements; but all 24 specific items were engineering tasks. Wasn't it possible that any man with engineering training could handle all 24 equally well, or at least with sufficient skill in each? This didn't seem a likely hypothesis, but it took research to prove otherwise.

It seemed logical that some men were better at some things than others, and that this would affect job performance. What characteristics varied from one type of job holder to another? What did research men have that the others didn't? What were the variable characteristics that would distinguish, not the jobs, but the people in them?

There are hundreds of individual characteristics of people. There are physical characteristics, as simple as height or weight, as complex as motor coordination or depth perception. There is achievement, in specific subjects from a curriculum and in broad areas such as vocabulary. There are mental skills, such as reasoning, clerical manipulation. There are emotional or personality traits, such as gregariousness, talkativeness, and introspection. All of these may have some effect on a man's relationship to a job. All may be factors in his adjustment and progress.

### Testing for characteristics

In this second phase of their research, ETS made up a battery of tests which would yield scores on 56 different variables or characteristics, including tests of ability, of achievement and of personality. These 56 included



all variables which had been suggested by engineering management as being important, plus a number which it was thought might turn out to be useful.

The tests were given to nearly 2,000 engineers in the five participating companies who had between four and seven years' experience. This length of experience was required to be sure that they had found their own way into the niches in which they felt most comfortable and for which they were most suited. It allowed a more accurate appraisal of their success in the job.

The results from the battery, when analyzed, showed that the initial list of 56 characteristics was a pretty good one. About 30 of them were sufficiently related to the experienced engineer group to make it advisable to follow through with further study. Of these 30, seven gave such good results that it is quite likely that they can be used to determine, just from the scores, a particular engineer's type. In other words, the scores achieved by an experienced engineer on these seven characteristics will allow him to be placed in his proper category. This is a long step forward towards being able to predict, for an inexperienced engineer, the type of job for which he is most suited.

The results of these early tests can be used as a guide towards the proper placement of a man. They are still preliminary, however, for the battery, as such, has not yet been developed. The names for qualities used in this account are merely descriptive, not definitive. They actually stand for whatever the particular test used, has measured.

#### Classifying the man

Some of the groups of engineers are easier to define than others. The research men, in particular, are unique and stand out distinctively. They are particularly good at quantitative and inductive reasoning, and are very much interested in ideas and theory.

At the other extreme, the sales engineers are almost as distinct and as easily detected a group. They are distinguished by their talkativeness, their impulsiveness, and their interest in economic matters.

Group VI, the men who work as supervisors, stand out for their interest in people, for their foresight, and because they pay a good deal of attention to the



Fire of unknown origin destroys historic Douglas County (Ga.) courthouse. (Photo by Atlanta Journal)

## Loss that will be felt for years

A look at history shows that courthouses boast no immunity . . . are as vulnerable to disaster as buildings down the street.

But when a courthouse is struck—and birth, marriage and property records are destroyed, as in the fire above—the loss is felt by one and all. Years are required to untangle the snarl.

A resolution recently passed by the Georgia General Assembly is a big step forward in protecting vital records, which are the connecting link with the past, and enable present custodians to function. It authorized a committee to study the advisability of constructing a building where all state and county records can be microfilmed, restored and placed for safekeeping, and "the prospect of destruction reduced to absolute minimum."

Note: Safe in the Secretary of State's office are Recordak Microfilm copies of Douglas County Tax Digest through

1953. Films are viewed in Recordak Film Reader . . . paper enlargements made directly from films at low cost.

New free booklet shows how more than 100 different types of business—thousands of concerns—are protecting vital records and simplifying daily routines with Recordak Microfilming. Some of the short cuts described should work equally well for you. And you'll see how savings outweigh all costs—you get up to 80 pictures for 1¢ with a Recordak Microfilmer; and you can buy one for as little as \$550. *Must reading for every executive!*

"Recordak" is a trademark

Prices quoted are subject to change without notice

**RECORDAK**

(Subsidiary of Eastman Kodak Company)

originator of modern microfilming—  
and its application to business routines



up to 28,000 pictures on  
one roll of Recordak Microfilm—  
protection you can't afford to miss

#### MAIL COUPON TODAY

RECORDAK CORPORATION (Subsidiary of Eastman Kodak Company)  
415 Madison Avenue, New York 17, N.Y.

F-7

Gentlemen: Please send free copy of "Short Cuts That Save Millions."

Name \_\_\_\_\_ Position \_\_\_\_\_

Company \_\_\_\_\_

Street \_\_\_\_\_

City \_\_\_\_\_ Zone \_\_\_\_\_ State \_\_\_\_\_

(Circle 138 for more information)



*She saves **half** the time...*



*Boss saves **all** the cost!*



*National's* adding machine...

**Live keyboard\* with keytouch adjustable to each operator!**

**Saves up to 50% hand motion — and effort!** Never before have so many time-and-effort-saving features been placed on one adding machine.

Every key operates the motor—so you can now *forget the motor bar*. No more back-and-forth hand motion from keys to motor bar.

Keys are instantly adjustable to *each operator's touch*! No wonder operators are so enthusiastic about it. They do their work faster with up to 50% *less effort*. New operating advantages, quiet-

ness, beauty!

"Live" Keyboard with Adjustable Keytouch *plus* 8 other time-saving features combined only on the National Adding Machine: Automatic Clear Signal... Subtractions in red... Automatic Credit Balance in red... Automatic space-up of tape when total prints... Large Answer Dials... Easy-touch Key Action... Full-Visible Keyboard with Automatic Ciphers... Rugged-Duty Construction.

**THE NATIONAL CASH REGISTER COMPANY, DAYTON 9, OHIO**  
989 OFFICES IN 94 COUNTRIES

(Circle 126 for more information)

A National Adding Machine pays for itself with the time-and-effort it saves, then continues savings as yearly profit. One hour a day saved with this new National will, in the average office, repay 100% a year on the investment. See a demonstration, today, on your own work. Call the nearest National branch office or National dealer.

TRADE MARK REG. U. S. PAT. OFF.

**National**

ADDING MACHINES • CASH REGISTERS  
ACCOUNTING MACHINES

future in making decisions.

While there are not yet enough design engineers covered by the study to give a good picture of this type, something can be said about the remaining three groups. Application, product and operations engineers are much alike, and not easily discerned as others.

The application engineer is like the research engineer, but not as extreme. He shows more interest in gadgets and machines, than do most engineers, but less interest in ideas and theory than the research man. The product engineer and the operations engineer do not have any particular outstanding characteristics, but it seems likely that their general score pattern will differentiate them from other engineers.

#### Personality differences

The best way of distinguishing one group from another is through a measure of their interests. Abilities come next, with special emphasis on reasoning power. Personality measures follow. Personality characteristics seem to be fixed earlier in a man's career, and even with our present imperfect tests, they are highly indicative.

A special study was made of the personality of engineers, and the relation of various personality characteristics upon success. The research team formed small sub-groups within each of the five engineering types. There were 100 men in each type who had been rated by their supervisors as being relatively more successful, and 50 rated less successful. These divisions could not be made with either design or product engineers.

The most significant of all personality qualities was *talkativeness*. While it had little or no relation to success within a category, it had a definite relation to the type. As might have been expected, sales engineers scored high here, research engineers the lowest, with the others in between. There is some indication that both for sales and technical engineers, the more talkative the more successful, while the reverse may be true for administrative types.

The next most significant factor has been given the label *status aspiration*, which is related to ambition or desire for recognition. Again, sales engineers rank highest in this quality, but the



successful salesmen are outranked by the less successful. *Impulsiveness* follows pretty much the same pattern, but within each type, it is the more successful who rank somewhat higher, although not very much so.

The administrative engineers are highest in *gregariousness*, with the sales engineers outranking research and development men. It apparently bears no relationship to success. The research men top all engineers in *liking to think*, followed closely by the supervisors. Both sales and miscellaneous technical groups score relatively low.

Some qualities, among which is *foresight*, are pretty much the same in all six types studied, but they show a definite relationship to success. The group of successful engineers in all categories, with the possible exception of the sales group, have more foresight than do the less successful.

In roughly decreasing order of significance, the following characteristics have some relationship to type of work and/or to success: *social know-how, masculinity, tolerance of ambiguity, self-acceptance, progressive vs. conservative, social conscience, artistic vs. practical, belief in group values, attitude to work, and frustration tolerance.*

#### Long range studies

A test battery, which measures the most indicative characteristics, has been developed, and is being given to most newly-hired engineers of the participating companies. The results of these tests are not being used, however, in placing these men, but normal procedures are being applied. After several years in the engineering world, their progress will be compared with the test results. Could some of the scores have been used to place them properly and more effectively? Would a more rapid state of stability have been achieved had the test scores replaced the judgments of the personnel people? No one really knows.

In the meantime, even without specific instructions and procedures, even before the final batteries are developed, the thinking that is behind the study, the general directions that seem to be indicated, the characteristics that have been identified, should help the employer of engineers to place his men effectively, and to cut turnover. m/m

## The Victor "Flick" that outdates all other calculators



## New Victor Automatic Printing Calculator

Saves You Costly Man-Hours Because It's Simpler, Easier, More Accurate To Use

Here's the greatest advancement in calculators in a decade. This exclusive Victor feature lets you *multiply or divide* with a gentle "Flick" of your finger. No mental counting. "Up" to multiply . . . "Down" to divide . . . middle position to add or subtract—and all *automatically!*

The new Victor Calculator prints your figures *on tape*, just as you would write them. Automatic Constant lever holds figures for repeated division or multiplication. Exclusive Total Transfer button eliminates need for re-entering totals.

Find out how much this Victor "Flick" can do for you—look under "V" for Victor in the adding machine section of your classified phone book or *mail the coupon below.*



### VICTOR ADDING MACHINE CO.

Chicago 18, Illinois

Victor-McCuskey Limited, Galt, Ontario

Manufacturers of Business Machines, Cash Registers, Business and Industrial Systems, Electronic Equipment, Electri-Cars

VICTOR ADDING MACHINE CO., Chicago 18, Illinois MM-756

Send me brochure on the New Victor Automatic Printing Calculator, showing all the features.

Name \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_

(Circle 161 for more information)

## SAVE TIME and MONEY

on price lists...parts lists...  
directories...catalogs...  
indexes...etc....

**ACME VISIBLE**

### photo panels the quick, easy way to reproduce lists...



**JUST TYPE**



**PHOTOGRAPH**



**REPRODUCE**

Save time and expense of typesetting; your typewriter is your compositor. Each line typed on individual card. Revisions quickly made, listings added or deleted, page arrangements changed and illustrations or headings added.

Always available for instant reference or use, easily kept up to date in your office and under your control, conveniently and compactly filed.

Reproductions can be made any proportionate size and printed by offset, planograph or other methods of commercial or office reproduction.

DISTRICT OFFICES AND REPRESENTATIVES IN PRINCIPAL CITIES

*Ask the man from Acme to show you examples*

ACME VISIBLE RECORDS, INC., Crozet, Virginia

C756

☐ Send us more information and literature on Photo Panels.

☐ We are interested in Acme Visible equipment for \_\_\_\_\_ records.

☐ Have representative call. Date \_\_\_\_\_ Time \_\_\_\_\_

Company \_\_\_\_\_ Attention \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ Zone \_\_\_\_\_ State \_\_\_\_\_

(Circle 150 for more information)

## sales ideas

# How to use motion pictures to sell technical products



A prospective customer of the Micromatic Hone Corporation asks if a micro honed valve can withstand pressure as high as 5,000 lbs. per square inch. It is important to him because he is a truck-manufacturer, and the pressure factor is critical in his diesel injectors. The "yes" answer is easy, but it doesn't carry much conviction unless the salesman can prove it; and proving a highly complicated industrial grinding process takes something more than words. It demands a flexible, authentic graphic display of the process in detail.

A film which demonstrates the honing process was created by the Jam Handy organization for Micromatic. It shows, through specially devised photographic means, what happens on the inside walls of a piston type valve while it is actually being honed. The salesman doesn't have to say much to the truck manufacturer after he shows the film. It is all there for him to see. The film shows the process in detail, demonstrating exactly why the honing can be accomplished to millionths of an inch tolerances. The pressure problem, so touchy in all industrial grinding processes, is clearly exposed and solved. This film is a major sales tool at the Micromatic company.

### The Film Program

The use of the motion picture began in a small way at Micromatic. Its first film report, on the regeneration of metallic bearing surfaces, was produced for the company in 1949. Besides the function of a high powered selling tool, it was designed to serve two other purposes: as part of an engineer and shop training program, and as a medium of industrial public relations.

Several unique photographic processes were utilized to demonstrate manufacturing operations. High speed photography, for example, showed the operation of various cutting tools. To show stress concentration at the point of a single edged tool on a work-piece during an ordinary grinding process, photoelastic photography was used. Schleiren photography is used to demonstrate the heating effects of ordinary grinding processes.

Originally, 40 field salesmen used the film to demonstrate the process to customers and prospective customers. There are now 125 prints in continuous use throughout the country.

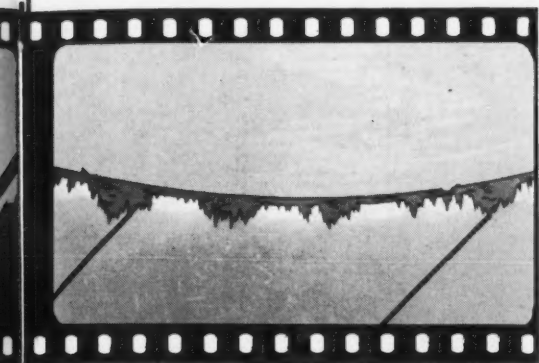
The success of the film was largely due to a person-to-person chain reaction. As soon as people in the machine tool and allied industries learned of the



LEFT: A microphotograph used in a technical business film demonstrates surface irregularities found in ordinary machining operations.

CENTER: Combined animation and regular photography illustrate the principle of the continuously changing cutting tip used in Microhoning.

RIGHT: A frame showing the imperfections in a plain bearing surface that result from metal rubbing against metal.



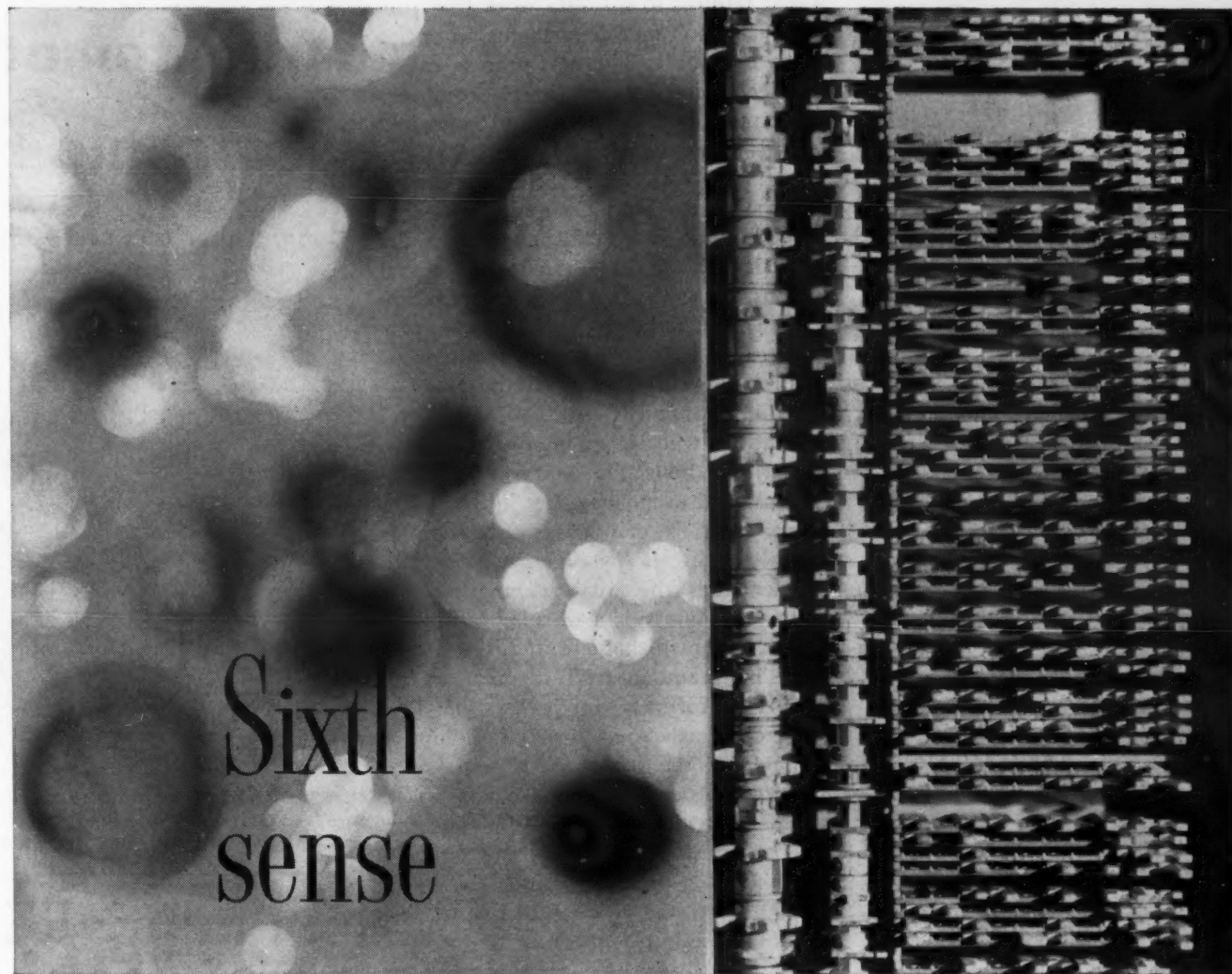
unusual content of the film, requests for it increased. This led to the printing of additional prints, and eventually, to the production of the second film on the honing process.

#### Shown at large meetings

Both films are shown at large meetings (such as those of the American Society of Tool Engineers) at engineering schools, at shop meetings, and before executives in the machine tool industry. Usually, when a film is booked, the company requesting the film will arrange to have all its processing men, design engineers, shop superintendent, and foremen attend the showing. Some companies go as far as to arrange meetings after the film showing to discuss various aspects of the microhoning process.

The results of the program are not always direct. It is sometimes difficult to trace down the initial audience exposure via film to a direct sale. But the company believes in its value and evidences this belief by the planning of new films as further sales tool.

For more information on films produced for business, circle number 234 on the Reader Service Card.



THIS "MECHANICAL BRAIN" inside a Burroughs Sensimatic Accounting Machine lets you breeze through every accounting job with almost pushbutton ease.

## makes error-free accounting decisions

**THINKS FOR ITSELF.** Because of the Sensimatic's amazing "mechanical brain," you simply enter the proper amounts on the keyboard . . . nudge a motor bar . . . and instantly the machine takes off *all by itself* to complete the posting sequence.

We call this brain a "sensing panel." One panel controls four different accounting jobs. You switch from job to job by simply turning a knob. For other operations (or even a new accounting system) you simply slip in another four-job panel.

Indeed, a Sensimatic gives you "sixth sense" accuracy, plus the flexibility

to handle *all* the accounting jobs for small firms . . . and the speed to let you glide through large volume, specialized accounting work. And this means that whatever your business or its size, you cut your accounting costs right to the bone!

Demonstration? Just call Burroughs locally—for only Burroughs makes the Sensimatic. Burroughs Corporation, Detroit 32, Michigan.

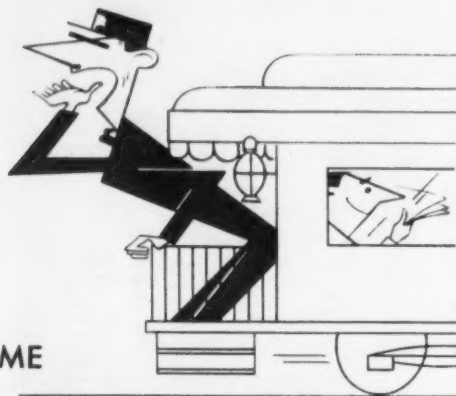


## Burroughs Sensimatic

"Burroughs" and "Sensimatic" are trademarks

(Circle 105 for more information)

ALL-ABOARD



IT'S TIME

NOW

TO SIGN UP FOR THE

## 1956 INTERNATIONAL SYSTEMS MEETING

October 22-23-24

Bellevue-Stratford Hotel • Philadelphia, Pa.

Two-and-a-half days of informative, profitable meetings designed to help you do a better job

### BEST YEAR YET... DON'T MISS IT

**General Sessions**—Authoritative, up-to-date evaluations of systems in action.

**Seminars**—Round-table discussions of systems problems. Wide selection of subjects from which to choose.

**Industry Group Meetings**—Selected industries. Shirt-sleeve exchange of ideas, theories, and problems common to specific business activities.

### 1956 SPECIAL NEW FEATURES

**Closed Circuit TV**—A closed-circuit TV program has been arranged with the U. S. Naval Aviation Supply Office, Phila., to cover the operation of their IBM-702. Two way video-audio contact for question and answer period.

**1st International Systems Award**—For the first time in the history of the association, an International Systems Award will be presented to a nationally known person whose contribution to American management has been significant in the light of SPA principles.

### GET FULL DETAILS TODAY

Write: J. A. MacQueen, General Chairman, 1956 International Systems Meeting, Dept. MM, Alan Wood Steel Company, Conshohocken, Pa.



SYSTEMS AND PROCEDURES  
ASSOCIATION OF AMERICA

(Circle 162 for more information)

A new electronic system reduces to minutes work that previously took one department an entire day to handle. The new process, called "Electronic Formulation," combines computing equipment and punched cards to automatically calculate manufacturing formulae at the Bay States Abrasive Products Company.

The process has eliminated a chronic bottleneck in manufacturing operations, by reducing order preparation time from ten days to one. It also produces calculations with a consistent accuracy beyond human capacity.

The company's products, industrial grinding wheels, are manufactured in literally thousands of formula variations, and every grinding job is different. First, a grinding application is analyzed by an Abrasive Engineer who determines the qualities needed. He then recommends a wheel specification that will furnish these qualities.

The manufacturer, in turn, calculates a formula for every grinding wheel specification ordered. The formula tells the factory the proportion of ingredients needed to make a wheel to match the specification of the engineer. The formula is the link between field engineering activities and the company's manufacturing facilities. It is a vital phase in the process.

First steps in the establishment of the program took place at the Harvard University Computation Laboratory, using the Mark IV Computer. Thousands of man hours of calculation work was done in only 1½ hours using this equipment. Every increment in grinding wheel hardness and abrasive grain concentration was calculated and spaced equally along straight line progressions. These uniformly incremented series provided the basic constant data required for the electronic formulation calculation. In addition to making electronic formulation possible, these increments made the entire specifying procedure more precise.

Bay State's new electronic computation equipment, using the established constant data, can precisely figure the grinding wheel formula to produce any specification in any size and quantity.

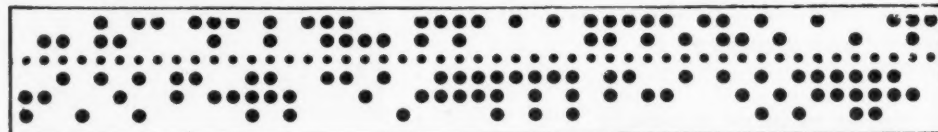
When an order for grinding wheels is received, the "constant" formula data cards are "fed" to the calculator. Then, cards carrying variable information

## An automation first: Electronic Formulation

Manufacturer cuts processing time from 24 hours to several minutes



ORDERS are transmitted to the factory from the branch office on punched tape. They are converted into punched cards which are processed in the electric computer. This system reduces processing time from 10 days to one.



9A-46		K5-V72		KA	
KINDS OF ABRASIVE	GRAIN SIZE	GRADES SOFT	STRUCTURES DENSE	BOND TYPES	BAY STATE SYMBOLS
Reg. Alum. Oxide	A	C	0	V = VITRIFIED	VITRIFIED BONDS
Spec. Alum. Oxide	2A	D	1	R = RUBBER	V2 (Standard Alum. Oxide)
" " "	3A	E	2	B = RESINOID	V3 (Standard Sil. Carbide)
" " "	4A	F	3	E = SHELLAC	V7
" " "	5A	G	4	M = METAL	V8
" " "	6A	H	5		V9
" " "	7A	I	6		VA
" " "	8A	J	7		VB
" " "	9A	K	8		VC
White Alum. Oxide	10	L	9		VD
Reg. Sil. Carbide	20	M	10		VE
Green Sil. Carbide	30	N	11		VF
1/2 Reg. Sil. Carbide	40	O	12		VG
1/2 Green Sil. Carbide	50	P	13		VH
Spec. Sil. Carbide	60	Q	14		VI
" " "	70	R	15		VJ
" " "	80	S	16		
1/2 Alum. Oxide	90	T	OPEN		
1/2 Sil. Carbide	100	U			
1/2 Spec. Alum. Oxide	120	V			
1/2 Sil. Carbide	150	W			
Diamond	180	X			
	220	Y			
	240	Z			
	260				
	280				
	320				
	400				
	500				
	600				

GRINDING WHEEL specifications have five basic elements. A change in any one of the elements produces a different grinding wheel. These variables compounded with variations in wheel size and the number ordered illustrate importance of order formulation.

MANAGEMENT METHODS



such as size of wheel, quantity of wheels ordered, customer identification number, product code, and shipping data are introduced. Manufacturing instructions, ingredient by ingredient, plus the other instructions, are then "delivered" from the equipment. These are typed on an eight-part form, one part of which goes directly to the factory as manufacturing instructions. The possibility of human error in these calculations is completely eliminated.

Every card, carrying the important "constant" data, is kept on file so that on all subsequent orders the grinding wheels will be formulated as before.

The equipment performing these processes is an IBM Card Program Calculator with storage unit. It can produce three completed orders per minute, each order involving 160 different calculations. The equipment also automatically checks each calculation for accuracy. Calculations are carried out to six places, or a millionth of a pound.

As an important supplement to this system, the company has direct TWX communication with each of its branch offices in Chicago, Cleveland, Detroit, and Pittsburgh. Orders come in to the factory from branches via TWX on a punched tape. The tape is then translated to punched cards by an IBM Tape-To-Card Converter. These cards go right into the electronic equipment for processing.

The introduction of this procedure broke a serious bottleneck in order processing. When in full operation, it reduces the time it takes an order given to a branch office to get into the company's factory from 10 days to only one.

In addition to calculating grinding wheel formulae and printing order forms, this system collects other vitally important data. The storage unit collects and holds information on the quantity of raw materials used. For instance, while the formulation calculations are taking place, the vital marketing and sales statistics relating to the type of products sold, types of customers and sales volume in territories can be accumulated and preserved.

Soon similar electronic computing systems will be applied to the manufacturing process with the actual ingredients of abrasive products being physically selected, measured, combined, and processed. m/m



...as reported by Mr. R. S. Heckler, Secretary-Treasurer, Philadelphia Wholesale Drug Company, Philadelphia, Pa.

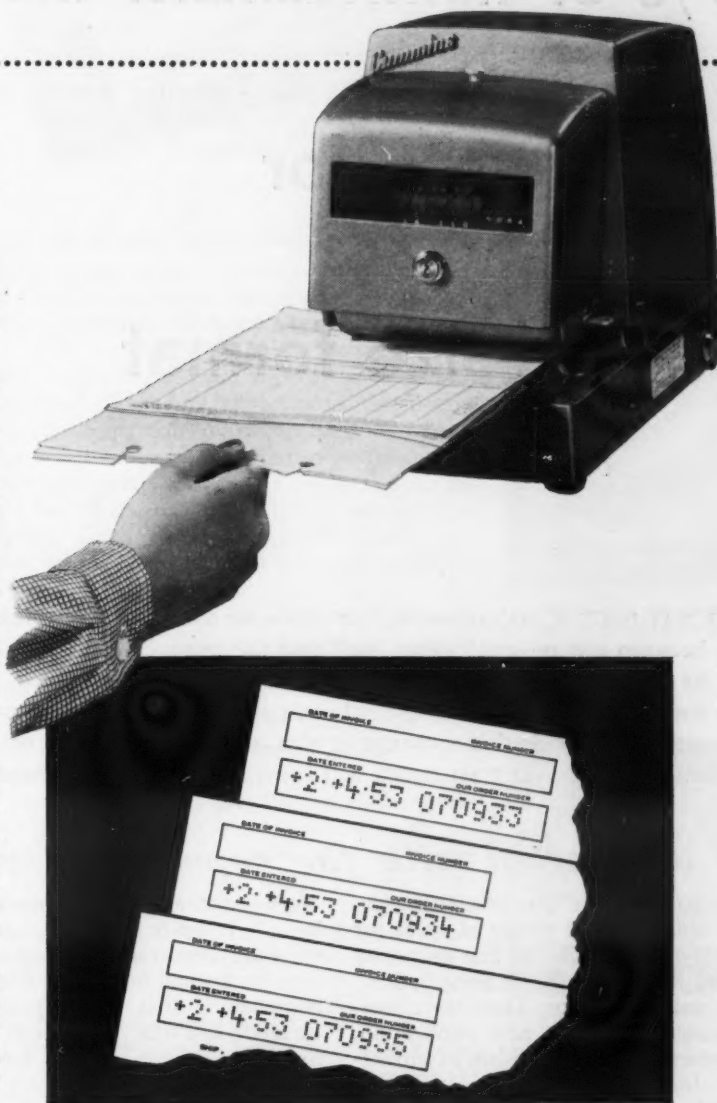
**CUMMINS** Automatic Numbering Perforators assign control numbers to sets of multiple copy forms in the sequence in which action is taken, providing effortless and automatic check-out of all transactions.

Since 1950, the Philadelphia Wholesale Drug Company has experienced unequalled efficiency, speed, and savings by numbering their multi-copy order forms with a Cummins Automatic Consecutive Numbering Perforator . . . thus insuring billing of all shipments, preventing unauthorized withdrawals of merchandise, and eliminating the need for tedious, periodic check-outs of orders entered. The Cummins Perforator also enables them to select a particular number and use it as a cut-off point for each day's shipments. No register need be maintained for missing numbers because of spoiled pre-numbered sets. One reading of the machine a day tells the numbers of all orders entered since the previous day.

This is a typical example of the many ways Cummins Automatic Numbering Perforators streamline operational and accounting procedures, eliminate errors, and effect over-all savings in time, labor and equipment costs. When the same Cummins control is applied to billing, savings are effected throughout receivable accounting and checking out of invoices becomes an effortless, fool proof operation.

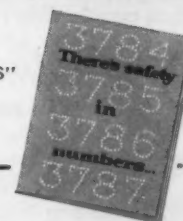
**ASK YOUR CPA.** The Systems Supervisor of your public accounting firm will explain the importance of checking out orders and invoices. You'll be ahead by investigating how Cummins Automatic Numbering Perforators can streamline your order system and increase efficiency.

"This machine gave us an automatic order register that helps meet delivery deadlines!"



**CUMMINS BUSINESS MACHINES**  
Division of Cummins-Chicago Corporation  
4740 North Ravenswood Ave. • Chicago 40, Illinois  
SALES AND SERVICE IN ALL PRINCIPAL CITIES

LOOK FOR "AAC-CUMMINS"  
(Automatic Accounting Controls) in your classified directory.



Get this FREE booklet!

See how a Cummins Perforator gives complete control over merchandise withdrawals. Write for this booklet now—ask for a working demonstration, using your present order form.

# What they said

## 83% of MANAGEMENT METHODS

## readers vote for

## standard-size format



IN THE MAY ISSUE of MANAGEMENT METHODS we asked for your personal preference between our present "super-size" and the more conventional 8 1/4 x 11 1/4 format. At the time of this writing, (June 4), 1361 readers have voted. While cards are still coming in, the poll is so overwhelmingly in favor of the standard format that we can safely decide that a change in size is in order. Starting with your September issue, MANAGEMENT METHODS will come in a new easy-to-handle format.

### Why we started with the super-size format

We had good design reasons. The wide-open spreads provided plenty of space for an open layout. In fact, our first issue won a prize for the "best graphic presentation" in a national competition. There were business reasons, too. As a new publication, we were faced with the problem of attracting attention in a hurry. The super-size accomplished that purpose. During our first year, even when people didn't remem-

ber our name, they did remember the "big book." In spite of these positive values, we were concerned from the very beginning by a small but steady trickle of letters complaining that the magazine "couldn't be filed" and that "it didn't fit a briefcase." Since the volume of these complaints was never great, we felt that people who were "agin" something were more apt to write than those who were satisfied.

### Why we conducted the poll

Then, in 1955 and early 1956 we mailed many thousands of letters to our readers asking them to verify their interest in our magazine. While our rate of return was exceptionally high, indicating basic satisfaction, a very large number of readers offered *unsolicited* complaints that the magazine was "clumsy to use." We decided to ask for a vote. Frankly, we were unprepared for the over-

whelming bias reflected in our poll. We had suspected that technically-minded men might object to the size, but we did not anticipate such a uniformly high protest from all levels of management men. We have itemized a breakdown of our returns by title of the readers who responded. We think you will agree that the vote indicates a need for change. We sincerely hope you will like the new package.

### HOW THEY VOTED

Title	Standard	Super	Title	Standard	Super
<b>TOP MANAGERS</b>			Operations Manager	1	1
Board Chairman	2	2	Branch Manager	7	3
President	102	23	Personnel Manager	14	4
Ass't. to President	11	4	Production Manager	3	2
President & Treas.	1	0	Plant Manager	22	2
Partner	9	0	Factory Supt.	2	1
Vice President	103	15	Plant Supt.	6	1
V. P. & Controller	10	1	Sales Manager	22	2
V. P. & Secretary	5	0	Merchandise Mgr.	0	1
V. P. & Treasurer	6	1	Marketing Director	1	0
Secretary	30	6	Advertising Mgr.	8	3
Controller-Sec'y.	3	0	Research Director	2	0
Assistant Sec'y.	16	2	Properties Manager	1	0
Sec'y. & Treasurer	28	5	Training & Educ. Mgr.	4	1
Controller-Treas.	1	0	Traffic Manager	1	0
Treasurer	56	13	Purchasing Agent	24	4
Ass't. Treasurer	27	1	Consultant	5	0
General Manager	59	14	Manager Methods & Procedures & Other Systems Supervisors	55	6
Ass't. Manager	1	0	Office Managers & Supervisors	79	27
Administrators	21	3	Misc. Supervisors	17	7
Comptroller	75	7	Misc. Engineers	17	4
Ass't. Comptroller	17	4	Misc. Titles	210	45
<b>OTHER MANAGERS</b>			<b>Total</b>	<b>1137</b>	<b>224</b>
Financial Officers, CPA's, Accounting Officers	48	8			
Business Manager	5	1			



## thought starters

Thought Starters deal with a "practical solution to a management problem." The Editor invites contributions—which are paid for at our normal space rates.

### PERSONNEL

thought starter

#### Using blind workers in in-plant feeding operations

The problem of in-plant feeding is being solved by many firms through the use of non-sighted workers. Local state agencies, representing the blind, take over the complete responsibility of company cafeterias and food vending machines. The agency, in turn, sets up blind workers in the operation.

The services, of course, vary with the needs of each establishment. They can range from a simple, one-man stand, selling wrapped sandwiches, candy, and a few other items, to a cafeteria serving hot meals around the clock.

In most states, the program is made self sustaining. The costs for materials and salaries are charged against the gross for each installation. A percentage is often taken by the state agency to cover the amortization of equipment, management services, and the guarantee of a minimum wage to operators of the smaller stands.

The space is usually furnished by management at no cost, and often the utilities are also provided free. The agency reflects this kind of saving in lower food costs to employees.

The state agency purchases and installs the necessary equipment which generally remains its property. It assigns a manager (blind) who is thoroughly trained for his job. In the larger installations, the manager hires assistants who are usually sighted people. The agency also provides regular and continuing supervision.

Although the use of these cafeterias in private industry is comparatively new, such facilities have been in Federal buildings since the Randolph-Sheppard Act of 1936.

Last year, the volume handled by the vending stand program for the blind in private industry reached a gross of \$23½ million. Among the companies

using the program are the General Petroleum Corporation, Sears, Roebuck & Company, Alvey Conveyor Company, and Robertshaw-Fulton Controls Co.

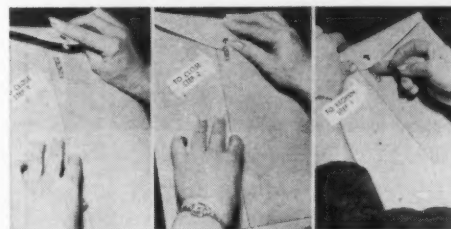
### ENVELOPES

thought starter

#### New envelope clasp saves time and money

Every executive who has ever broken a finger nail or a clasp prong on a clasp envelope will appreciate a new, easy operating clasp.

For closing, the fold of the envelope



is just inserted between two metal portions. The hand never touches the metal, and no metal parts are bent. Opening the envelope is equally simple.

Since there are no prongs to bend, the new envelope has a much longer life than the double prong clasp type. The new clasp speeds up handling to a point where the manufacturer estimates savings in time amounting to \$1 or more per thousand envelopes.

For more information, circle number 235 on Reader Service Card.

### FORMS

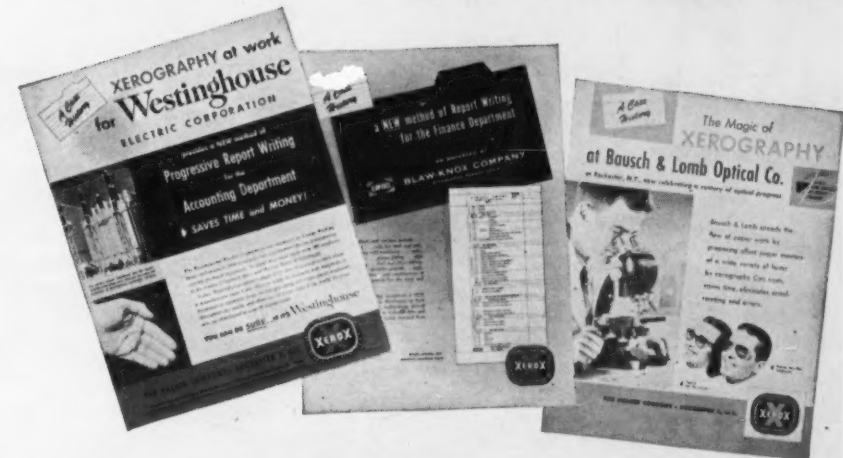
thought starter

#### Bank stickers simplify new account transfer process

A self-adhesive, imprinted sticker enables firms to conduct "business as usual" during the process of transferring an account to another bank, and eliminates an irksome problem.

When a company changes its account, it must be prepared to do busi-

## HOW XEROGRAPHY SPEEDS PAPERWORK cuts duplicating costs in a wide variety of SYSTEMS APPLICATIONS



#### • Send for these case histories

1. Progressive Report Writing for the Accounting Department at Westinghouse Electric Corporation
2. Report Writing for the Finance Department at Blaw-Knox Co.
3. Production Control System at Bausch & Lomb Optical Co.

In addition to the hundreds of applications in general duplicating, xerography is becoming increasingly important in systems procedures. Westinghouse, Blaw-Knox and Bausch & Lomb are using xerography and offset duplicating to cut duplicating costs in their specific applications and to speed paperwork. The versatility of xerography is shown in three completely different procedures explained in detail in the case history folders available on request.

These companies are only a few of the many hundreds in business, industry and government using the magic of xerography to speed the flow of paperwork and to cut duplicating costs.

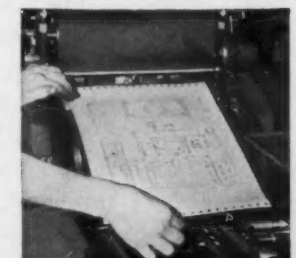
Anything written, typed, drawn or printed can be reproduced with photographic accuracy by xerography onto masters for duplicating.

Now you can copy onto offset paper masters, pre-sensitized positive working metal masters, spirit (or other fluid-type) masters, translucent masters, by this versatile, photo-exact, dry, electrostatic process. Original copy can be reduced, enlarged or made same size with Xerox® copying equipment. Masters can be made from opaque originals or from copy on both sides.

Write for any of the Systems Applications case histories. Other proof of performance folders are available also, showing how xerography speeds paperwork and cuts duplicating costs for business, industry and government.



Original is copied onto paper master by xerography in less than three minutes.



Paper master is placed on offset duplicator to produce multiple copies.

**THE HALOID COMPANY**  
56-7X HALOID STREET, ROCHESTER 3, NEW YORK  
BRANCH OFFICES IN PRINCIPAL U.S. CITIES AND TORONTO

**XEROGRAPHY**

(ZE-ROG-RA-FEE)

The fastest, cheapest, most versatile way to make masters for duplicating



(Circle 119 for more information)



## A Fine Office Doesn't Just Happen

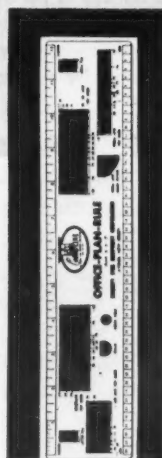
The Simplicity Of A Fine Office is usually an indication of careful thought and planning—this is vital to efficient operation and smooth working procedures.

You will often find Security Steel in these offices (there are 4 complete lines to choose from) for this is equipment which gives the most in efficiency, and attractiveness, and economy.

In planning a fine office or better work areas, you will be helped greatly by the Security Plan Rule—accurately proportioned cut-outs for various items of equipment, enables you to quickly put your ideas on paper. We shall be glad to send you one—together with complete illustrated brochure in color—if requested on your letterhead.



**SEND TODAY**, on your letterhead, for a folder in full color showing the 4 superb lines—Crestline—T.D. Series—4 Leg Line—Versa Line—and the Security Plan Rule which will help you greatly, in doing a fine new office or rearranging now, for greater efficiency and satisfaction.



### SECURITY STEEL EQUIPMENT CORPORATION

515 Middlesex Road, Avenel, New Jersey

Please send me your full color brochure and your Office Plan Rule.

Name \_\_\_\_\_ Title \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ Zone \_\_\_\_\_ State \_\_\_\_\_

(Circle 137 for more information)

**Madison Bank & Trust Co.**  
CHICAGO, ILLINOIS

**Madison Bank & Co.**  
CHICAGO, IL

**Madison Bank**  
CHICAGO

ness via the new bank immediately. However, since the imprinting of new checks involves a certain period of time, checks bearing the name of the former bank must be used until the new ones are available.

Labels called "draft stickers" simplify this changeover. They are pressure-sensitive and can be applied swiftly and firmly without moistening.

Supplied gratis to accounts that require them, the stickers, imprinted with the bank's name and address, are used to cover up the name of the former bank.

For more information, circle number 236 on the Reader Service Card.

### EXECUTIVE thought starter

#### New literature of interest to management

##### PLANT SITE LOCATION INFORMATION LITERATURE

A Data Sheet and Factfile Service is now available, without cost, to anyone interested in plant site locations in The Metropolitan Oakland Area of California. The service consists of a special file folder and a series of data sheets on such basics as climate, markets, transportation, and distribution, living conditions, and labor supply. These sheets are supplemented by an outline of the specific information made available through special reports compiled from the industrial survey maintained by the area, and by new data sheets on allied subjects which are issued from time to time. As new information develops, all existing data sheets are revised to bring them up to date and mailed to those who have the Factfile.

For a free copy, circle number 233 on the Reader Service Card.

MANAGEMENT METHODS



# Work center

"...men and machines don't work in a vacuum. Though you may saturate your Work Stations with skilled workers and modern tools, they can produce efficiently only when 'community' factors like traffic control, and adequate lighting, and proper communications—and even creature comforts—are properly integrated."

## PLANNING IDEAS IN THIS ISSUE

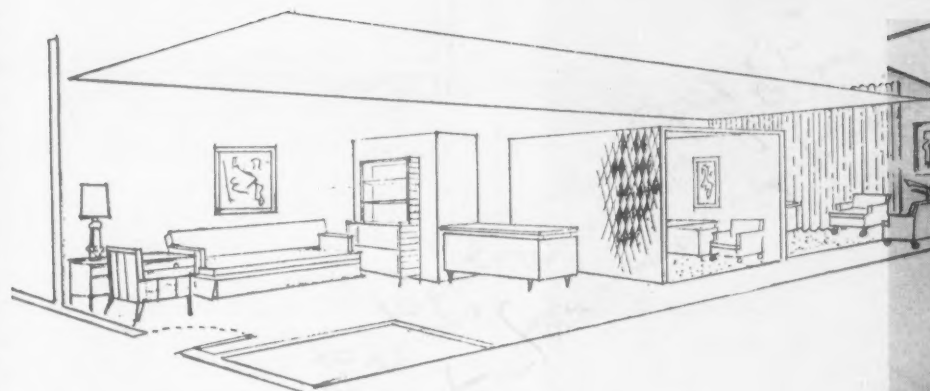
**How to gain warehouse space:** Here's how to make better utilization of your present storage areas. Revised aisle layout and new materials handling equipment can triple the amount of available space. The before and after plans of Tappan Stove Co. detail how easily it works ... 34

**Carpet squares achieve unique designs:** Low cost, self-adhesive squares dress up the walls and floors of any modern office. These self-cushioned "tiles" also provide good sound conditioning. The design and color possibilities are limitless ..... 36

**An office designed for lady executives:** Here are the details of a feminine-oriented work space for female "brass." The furnishings are delicate and light ..... 37

**Executive suite provides space without clutter:** Two massively simple units provide ample desk, drawers, and conference areas, yet are not bulky or space consuming ... 38

## Getting the most from a branch office

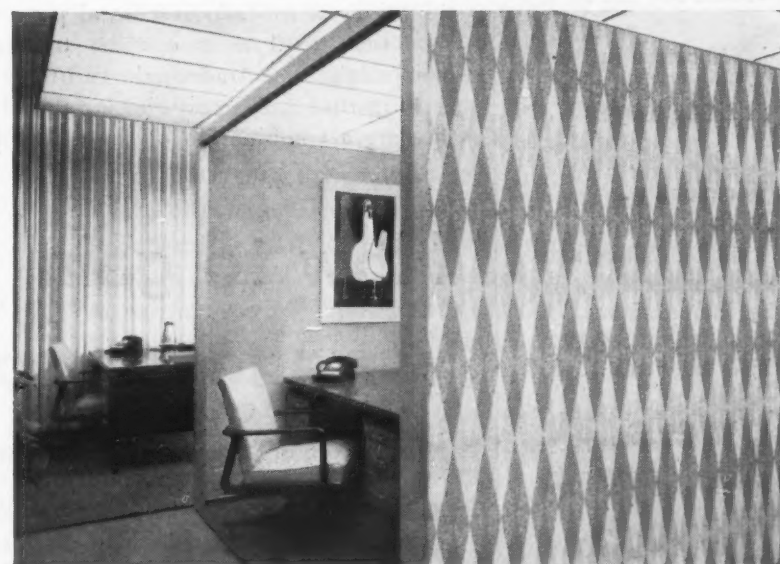


Why do many companies neglect their regional offices when renovation and modernization time rolls around at main headquarters? It's a question worth pondering especially in view of what the Sprague Meter Company was able to do with its San Francisco office. The branch office also does business and receives important

The visitor, opening the front door of the new branch office of the Sprague Meter Company, sees this attractive private reception area.



BEFORE

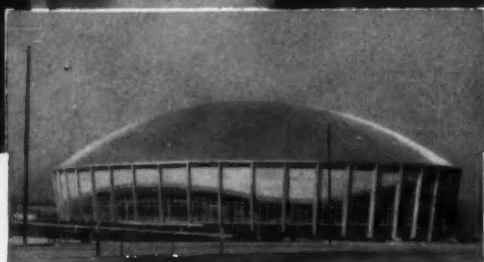


Two semi-private offices, completely separated from the reception area provide executives with superior working facilities.

## COTTON\* goes to every show at Charlotte Coliseum



\*Fairfax Towels used by Coliseum, Douglas Municipal Airport, and Owens Auditorium are supplied by Charlotte Linen Service, Division of National Linen Service Corporation.



● The citizens of Charlotte, N.C., are justifiably proud of their new Coliseum, and frequently fill it to its 13,000 capacity to attend a variety of cultural programs, sports events and exhibitions.

Such large gatherings pose special problems in traffic, maintenance, and patron comfort. To help solve some of them, the operators of the Coliseum (and also the Owens Auditorium and Douglas Municipal Airport) provide fresh cotton towels in every washroom. They have found that cotton towels speed up washroom traffic, keep washrooms neater, and reduce maintenance costs. And they have also found a definite public preference for the soft, at-home comfort of cotton towels.

Follow the lead of wise management—give the towel job to cotton in your office building, plant or institution. Write for free booklet which explains how cotton towel service will help you. The address: Fairfax, Dept. G7, 65 Worth Street, New York 13, N. Y.

### Here's How Linen Supply Works . . .

You buy nothing! Your linen supply dealer furnishes everything at low service cost—cabinets, pickup and delivery, automatic supply of freshly laundered towels and uniforms. Quantities can be increased or decreased on short notice. Just look up LINEN SUPPLY or TOWEL SUPPLY in your classified telephone book.

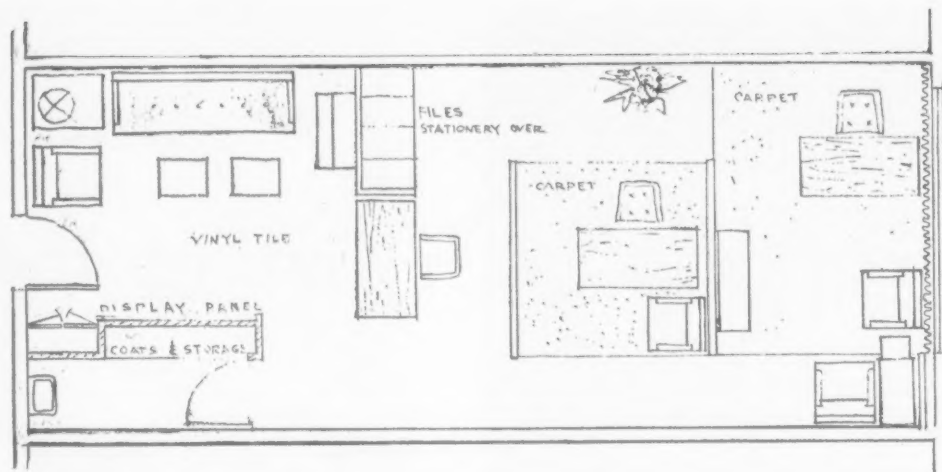
### Clean Cotton Towels . . .

*Sure Sign of Good Management*

**Fairfax Towels**



WELLINGTON SEARS CO., SELLING AGENTS, 65 WORTH STREET, NEW YORK 13  
(Circle 148 for more information)



visitors, and the company is obviously judged by its facilities.

Before modernization, the 40' x 18' quarters of the San Francisco branch suffered from the lack of convenient storage facilities. It was a cold, barren office in which major space areas were wasted. The single door and window provided the only ventilation, and the unbroken expanse of ceiling made the office acoustically impractical. Most important, it just failed to make the "right" kind of impression.

Using the principle of "the decorative concept of space," William Pahlmann Associates, interior designers, created three semiprivate areas. The floor of the entire office was covered with vinyl tile in a cocoa color with black and white terrazzo pattern. The two semiprivate offices are covered with area rugs of a tweedy texture, picking up all of the wall colors. Brilliant color combinations of avocado green and pumpkin were used as a contrast to the company's color trademark, turquoise.

Furniture and accessories for the office are a combination of the old and

new. The modern walnut desk tops covered with Formica are supported by black steel frames which also hold two three-drawer steel units in suspension. These walnut desks plus wall panels provide storage space. Modern occasional chairs are on heavy casters to permit their easy movement from one section of the office to the other for business conferences.

A dropped luminous ceiling was installed, and lightweight aluminum framed partitions separate the area. The one window wall has been covered with off-white split bamboo blinds and draperies of the same color.

A coat and storage room for supplies was created through the skillful installation of 8' walnut panels. These architectural storage units became a decorative as well as functional part of the over-all scheme.

The finished effect of this office is a combination of pleasant efficiency and a homelike comfort and elegance—a direct contrast to the indifference applied to most branch office interiors by parent companies. m/m

## How to gain warehouse space

### Narrow aisles and new equipment triples available storage area

Many a warehouse that seems to be bursting at the seams, in reality may be only half-filled. Studies have shown that aisles are often much wider than necessary, and that

goods are not stacked as high as they can be with the use of modern materials handling equipment.

The success of narrow aisles, coupled with materials handling

MANAGEMENT METHODS



equipment, to improve warehousing operations while cutting costs, was clearly demonstrated in the Mansfield, Ohio plant of the Tappan Stove Company. It employs about 1,000 persons in manufacturing gas and electric ranges, a process that requires frequent handling of components.

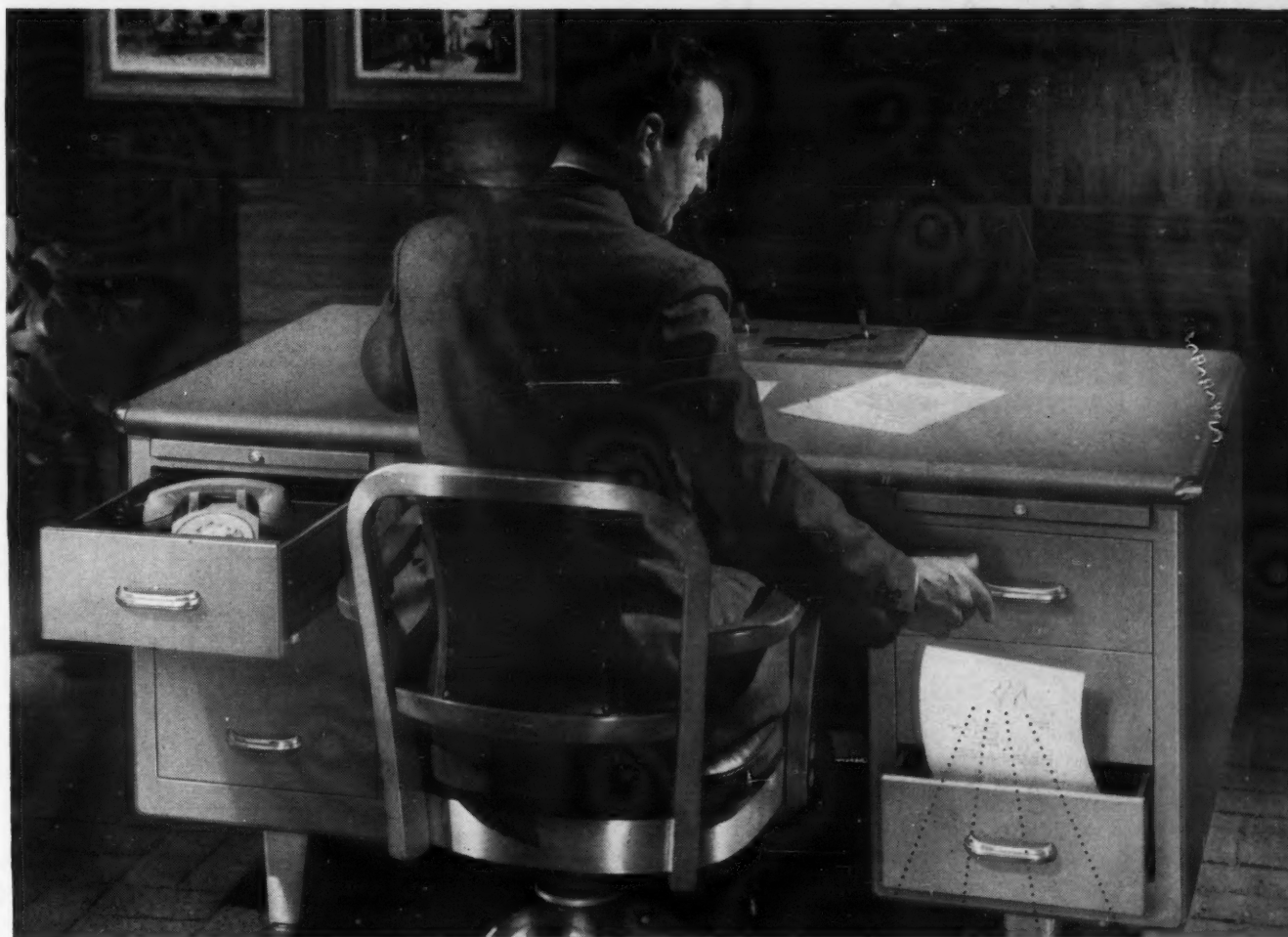
The demand for additional storage space is intensified by today's trend toward producing a greater variety of models and color combinations of appliances. New warehouse facilities may be entirely unnecessary if all existing storage space is put to work. Space *not* being used for storage is tying up capital at the rate of \$5 to \$10 for every square foot at today's prices. One simple answer, as Tappan discovered, was to trim down the width of aisles and to stack higher.

Twelve-foot aisles are still found in many plants and warehouses because materials handling equipment used requires that much maneuvering room even when stored units measure four square feet or less. New fork lift trucks, especially designed for close-quarter operation, made it possible to reduce aisle space by as much as 50 percent. These new trucks also have a longer reach to permit higher stacking, thus putting a large amount of unused space near the ceiling to work.

Plant engineer D. L. Snyder reports that one new high lift, straddle type fork lift truck, used with stacking type storage skids, is able to store three times as much material in its 20,000



JULY 1956



Now, letter trays, phone and wastebasket are in the drawers.

## Waste paper baskets are now a waste themselves

This man is making use of one of many innovations found only in Shaw-Walker *Organized Desks*. It's a wastebasket drawer. Out of sight, instantly accessible, easily removed, it holds more paper than four ordinary wastebaskets. Saves time, floor space and stumbling.

The *Organized Desk* is guaranteed to help you get more done, more easily, more quickly. Its drawers organize everything from paper clips to important records—put what's needed most in the easiest position for quickest use—eliminate clutter and confusion.

One or two Shaw-Walker *Organized Desks* in your office will convince you that all your



desk people should have this new profit tool.

The 292-page Shaw-Walker "Office Guide" pictures, describes and plainly prices eighty-six *Organized Desks* and 5,000 matching items. Free, when requested on business letterhead. Write Shaw-Walker, Muskegon 91, Michigan.



# SHAW-WALKER

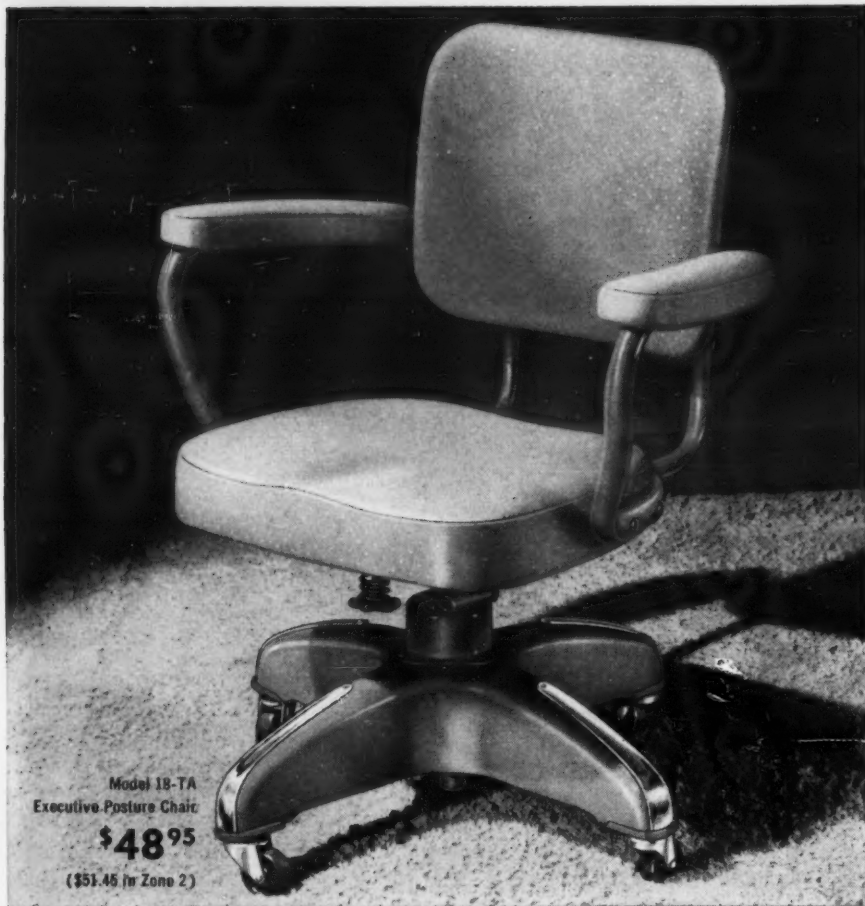
(Circle 149 for more information)

Largest Exclusive Makers of Office Equipment  
Muskegon 91, Mich. Representatives Everywhere

# "Office fashioned"

...FOR THE APPEARANCE

AND COMFORT TODAY'S EXECUTIVE DEMANDS!



Model 18-TA  
Executive Posture Chair  
**\$48.95**  
(\$51.45 in Zone 2)

## COSCO® Office Chairs

Here is the chair that today's practical-minded executive requires. Designed by seating engineers and mass-produced by skilled craftsmen... to look better, feel better and last longer than other chairs costing twice as much. See for yourself. Give Cosco "Office fashioned" Seating a try without cost or obligation. Call your Cosco dealer now, or mail coupon below, for free 10-day trial.

Find your COSCO dealer in yellow pages of phone book or attach coupon to your letterhead

HAMILTON MANUFACTURING CORPORATION, Dept. MM-76, Columbus, Indiana  
☐ Without obligation, I would like a COSCO Executive Chair on free 10-day trial.

☐ Also, free trial on Secretarial Chair ☐ Conference Chair  
☐ 22-L General Chair ☐ Full information on COSCO Chairs  
☐ COSCO Business Furniture

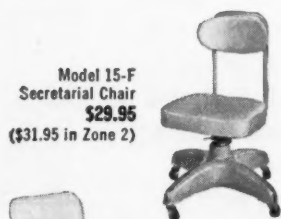
Firm.....

By.....

Address.....

Also available in Canada, Alaska and Hawaii through authorized COSCO dealers.

(Circle 120 for more information)



Model 15-F  
Secretarial Chair  
**\$29.95**  
(\$31.95 in Zone 2)

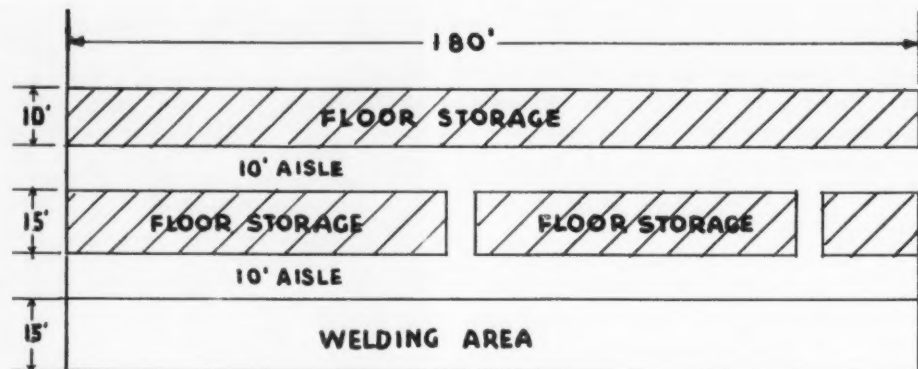


Model 20-LA  
Conference Chair  
**\$28.95**  
(\$30.95 in Zone 2)



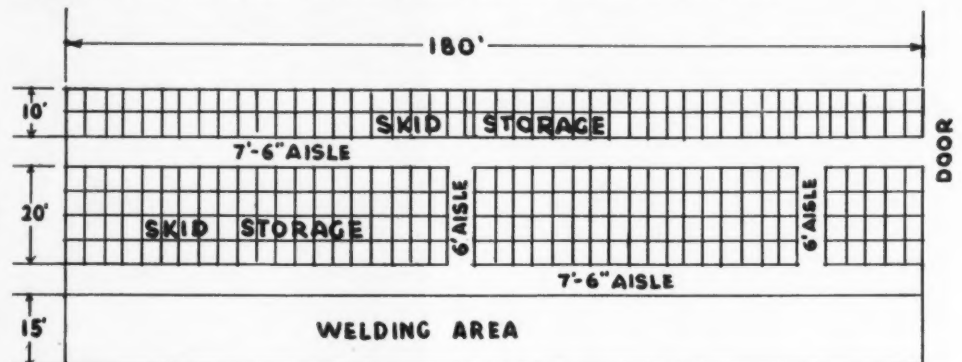
Model 22-L  
General Chair  
**\$12.95**  
(\$13.95 in Zone 2)

(Zone 2—Texas and 11 Western States)  
COPYRIGHT, 1956



ABOVE: This is the floor plan of the warehousing area prior to layout revision.

BELOW: The new layout permits greater storage, saves handling time.



square foot storage area as it did previously. In addition, the truck with the new skid saves some 20 man hours a day, has reduced handling damage, and has greatly contributed to the flexibility of the entire operation.

Before Tappan modernized its materials handling system, the parts were removed by hand from a skid as they were delivered from the fabrication department and stacked in rows on the floor. As the welders required the parts, they were loaded again on the skids and delivered by handtruck.

The material in process or pre-weld now is stored on the special skids until required in the welding area, then the entire skid and its load is delivered by the truck without rehandling. The company has fewer damaged parts since it has eliminated the unloading and reloading operation. The new handling method also permits a much faster changeover from one welding job to another, and quick and easy shifting of loaded skids in the storage area permits use of the space to the best advantage.

Another advantage of narrower aisles, when order picking is involved, is the saving in wages. An order picker is estimated to spend more than half

of his time walking from one stack to another. Less than half actually goes into selecting the merchandise, loading and checking it. Narrower aisles speed up selection, cut down on his foot work, and generally increase output.

A company doesn't have to rank among the industrial giants to enjoy the benefits of this new equipment. Surveys have shown that as much as \$25,000 to \$40,000 can be tied up in waste space in a storage area only 100 by 100 feet. Other companies can achieve the same savings and smooth operation that Tappan does with its new mechanical method of materials handling.

For more information on narrow aisle warehousing, circle number 241 on the Reader Service Card.

plan-  
ning  
idea

Low cost carpet  
squares achieve  
unique design

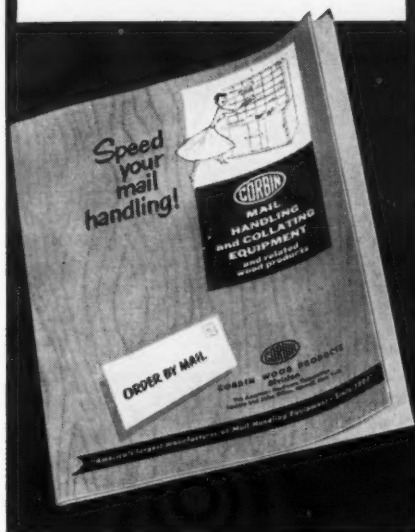
Ingenious self-sticking, self-cushioned carpet squares are proving to be one of the most exciting materials available for the decorating of business offices. They provide an unusual, individual-

MANAGEMENT METHODS



## Streamline

**your  
mail  
handling  
...and  
save!**



You get more than smooth-flowing mail service, free from waste motion and congestion when you install CORBIN Mail Handling Equipment. You get substantial money-savings as well!

First; buying direct from CORBIN saves you handling costs. You merely select what you need from the free, illustrated catalog and order. Second; CORBIN fine wood construction, with no sharp edges, saves you maintenance costs . . . eliminates rusting, scaling, and pitting problems. You get generations of troublefree service.

Modernize your mail handling now—the CORBIN way. You'll save, right down the line. For full details, send for free illustrated catalog.

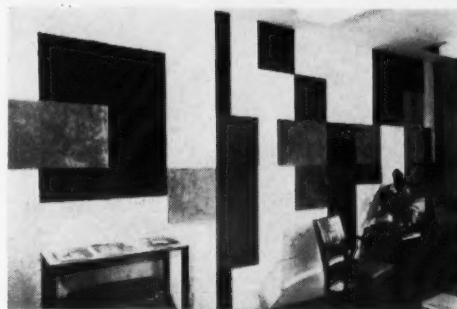


CORBIN Wood Products Division, Dept. MJ  
The American Hardware Corporation  
Hornell, New York  
Please send me your free illustrated catalog of Corbin Mail Handling Equipment and other Corbin Wood Products.

NAME.....  
ADDRESS.....  
FIRM.....

(Circle 109 for more information)

JULY 1956



ABOVE: Self-sticking carpet tiles are used to create a wall montage that is unique, decorative and functional. BELOW: A geometric pattern for carpeting executive office.



ized, and colorful decor. Any number of designs can be created by the decorator: checkerboards, harlequins, stripes and Mondrian effects of infinite variety.

Wall-to-wall carpeting can be had at economical price, and installation is simple. The 18" squares of cotton carpet, each with a built-in cushion and pressure-sensitive adhesive backing, are self-sticking on any surface, including primed cement. Maintenance is also relatively inexpensive: cigarette burns, ink stains or "foot-path" wear can be removed simply by replacing the damaged square.

A particularly functional purpose, yet extremely attractive, is their use for wall treatments. Aside from the striking, luxurious appearance, it is an excellent sound conditioning device.

For more information, circle number 242 on the Reader Service Card.

**plan-  
ning  
idea**

**Designer creates  
office suited for  
lady executives**

For that small but happy breed of executive, the female, Everett Brown, A.I.D., has developed a unique office

*Record handling safer . . .  
more efficient for gas company*

*with*



*by Watson*



A Rol-Dex unit in a metropolitan gas company customer's accounting section. Housing customer history cards, the unit provides greater convenience . . . increased working comfort.

When old files caused congestion because numerous clerks had to gain access to the records, this progressive gas company put Rol-Dex to work:

- *providing over 90% accessibility to outside reference.*
- *eliminating necessity of carrying trays to and from desks.*
- *improving working comfort, thereby reducing expensive turnover.*

With ROL-DEX, records roll to the seated clerk . . . increasing speed—reducing fatigue!

*Send for more information on the  
above and other Rol-Dex installations*



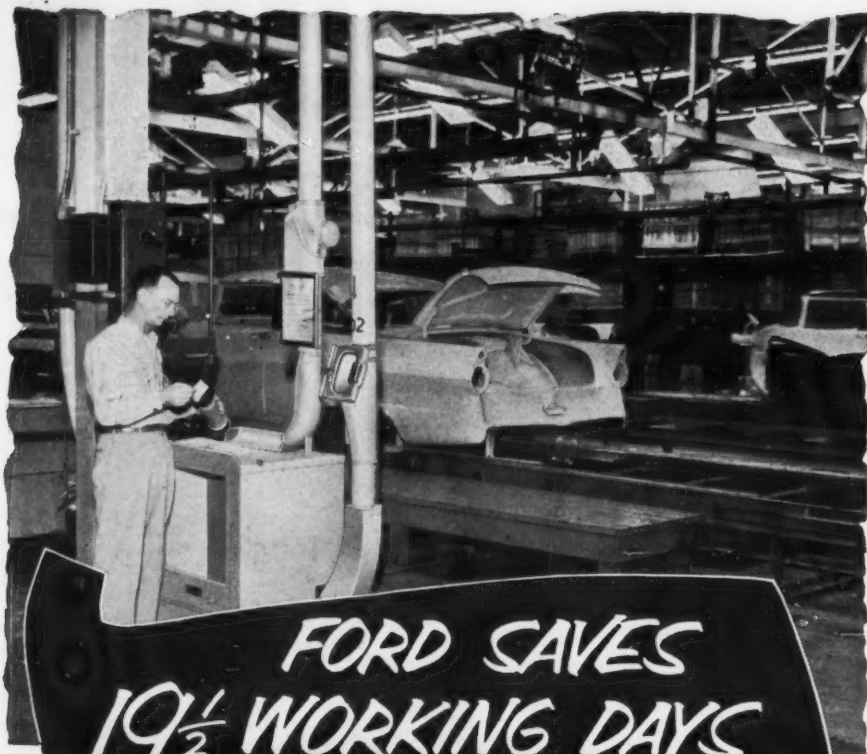
WATSON MANUFACTURING CO., Inc.  
Rol-Dex Division, Dept. E-7  
Jamestown, New York

Please send me information about ROL-DEX and TRANS-DEX record units.

Company.....  
Name.....Title.....  
Street.....Zone.....  
City.....State.....



(Circle 163 for more information)



**FORD SAVES  
19½ WORKING DAYS  
EVERY DAY**

## **LAMSON AUTOMATIC AIRTUBE SYSTEM TURNS THE TRICK**

Cards, forms, records—all types of written messages travel between the most distant parts of the big, new Ford plant in Mahwah, N. J. in 2 minutes—the Lamson way. By messenger, the same trip would take 20 minutes.

Assembling 1100 cars and light trucks per day, the Ford Mahwah plant occupies 2,000,000 sq. ft. of space. Each of the 26 stations of the Lamson Automatic Airtube System sends or receives an average of 20 carriers a day. At 2 minutes a trip, carrying time is 1,040 minutes a day. By messenger the same trips would take 10,400 minutes a day. Ford's time saving is 9,360 minutes, 156 hours a day . . . or 19½ working days, every day! And the Airtube System is *always* on the job—always covers the distance in the *shortest possible time*.

Lamson Automatic Airtube Systems are quickly installed, with low initial and operating costs. Localized wiring saves time and expense because no wiring leads from a central location. Station controls consist of switch, power unit and deflector. More stations may be easily added as the need arises.

## **FREE CATALOG!**

Read how a Lamson Automatic Airtube System will improve the speed and efficiency of communications in your plant. Write for the 52-page catalog "Airtube on Target."

**FOR FREE INFORMATION  
CLIP TO YOUR LETTERHEAD**



**LAMSON  
CORPORATION**

3747 Lamson Street, Syracuse 1, New York  
Plants in Syracuse and San Francisco  
Offices in Principal Cities

Please send me your 52-page  
catalog "Airtube on Target."

3747

(Circle 122 for more information)



setting. Presented at the American Institute of Decorators' annual show in San Francisco, this office mixes oriental styling and graceful feminine lines.

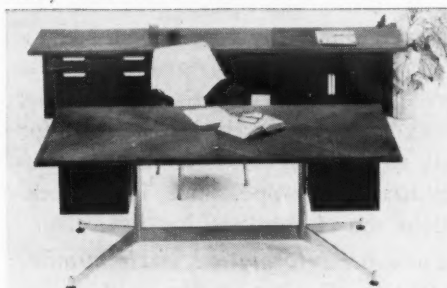
The big feature of the office is its desk, which boasts a reversible top and cabinets on wheels. These can be moved out when the desk is used as a conference table. The office, though small in size, demonstrates the feminine requirements of delicate furnishing. The walls of rice paper panels are covered in multi-colored woven leather strips. Feminine accoutrements include a Japanese tea set, and live bamboo shoots growing from a plant box on the floor.

**plan-  
ning  
idea**

**Executive suite  
provides space  
without clutter**

A new two-piece executive suite provides abundant drawer and conference space, yet it allows a reduction in clutter and bulk. This new group comprises a desk seven feet long and three feet deep, and has a large conference-top working area.

The credenza, or wall unit, is basically the work area. The credenza is



nine feet long and two feet deep. It contains two large filing drawers, two small utility drawers, a double-door storage compartment, ample working area, and a knee-space section. The suite is fashioned of African mahogany in a deep amber finish with diamond-matched veneering.

For more information, circle number 239 on the Reader Service Card.

C.C. MOKUM SOLVES ANOTHER

## **COFFEE BREAK PROBLEM**



by AL CAPP



The coffee-break is a problem in any size office or plant! A Rudd-Melikian dispenser is the answer. It's enjoyed by employees—helps keep them at the job. Conveniently and dependably serves Kwik-Kafé coffee—100% pure, fresh-frozen. Check with your local Kwik-Kafé dealer or write direct to us for complete details.

**RUDD-MELIKIAN, INC.**  
Halboro, Pa.



Gentlemen:  
Please send me Booklet MM-15G explaining how to control the coffee-break with R-M dispensers.

Name.....  
Firm.....  
Street.....  
City.....Zone.....State.....

(Circle 136 for more information)

MANAGEMENT METHODS





## Art Metal organizes your business home... completely

An Art Metal office has just one thing in mind...to get its owner swiftly and easily through each business day—helping to make his time more productive, his work more satisfying.

It does this in many ways as a result of Art Metal's ability to *do the whole job*.

Your Art Metal desk is a show-piece of the art of casemaking in steel, with all drawer-space functionally organized

for individual work needs. Your correct-seating aluminum posture chair is designed to keep you 9 AM-fresh all day long. There are models for every executive and general office requirement.

Naturally, Art Metal completes the well-organized business home with credenzas and wall tables for executive convenience...space-saving modular units...and the world's fastest filing

equipment, all cleanly styled and built for lasting service.

To simplify your planning and to give your office the pleasing *appearance* that comes of good planning, make use of Art Metal's Office Planning Service. It's the most complete ever developed. Available through your local dealer or branch office—listed in the Yellow Pages under "Office Equipment".

**MAY WE SEND YOU** full-color reproductions of a new group of decorator-designed Art Metal executive offices? Just drop a line to Art Metal Construction Company, Jamestown, New York.



For 68 years  
the hallmark  
of the finest  
in office  
equipment  
and systems.



**WANTED**

*by every office worker:*

**FATIGUE-FREE** *working comfort that helps them do a better job, EASIER*

At the end of the day, do your office people have the same tempo, the same quality of output as at the beginning? They can, when you give them Art Metal Correct Seating Office Chairs... the chairs that are scientifically designed to provide fatigue-free comfort.

The greatest comfort feature ever offered in office chairs is the "Tilt-Action" seat, exclusive with Art Metal in aluminum chairs. When you lean

back your feet remain on the floor...you enjoy complete in-place relaxation.

Art Metal's "Live-Action" back is self-adjusting...rubber shock mounts "give" with the slightest movements, yet support the body in correct working posture. Seats and backs are correctly formed and cushioned with foam latex for coolness and all-day comfort.

Art Metal chairs enhance the appearance of any office. Coverings feature the

finest leathers and fabrics in new decorator colors. Exposed aluminum is satin-finished and anodized. Nineteen styles for executive and general office use.

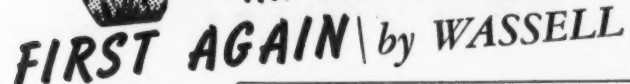
Find out now how Art Metal Correct Seating Aluminum Chairs can help you reduce office costs through elimination of working fatigue and loss of efficiency. Your local Art Metal dealer or branch office is listed in the Yellow Pages under "Office Equipment"...or write us.

**ASK US FOR OUR AUTHORITATIVE FREE BULLETIN...** reporting on a study of correct seating posture and its effect on office work production. Write Art Metal Construction Company, Jamestown 4, New York.



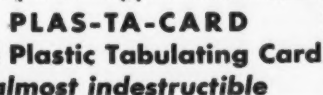
For 68 years the hallmark of the finest in office equipment and systems.





## Plas-ta-card

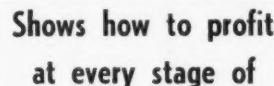
## SELF- GUIDE



**Self-Guides** go thru Tabulating Machines—No guides to remove! No guides to replace! Make your tab cards as fast as the fastest card file.

**Effective Tools for Effective Management**  
**WASSELL ORGANIZATION, INC.** Westport, Conn.

(Circle 157 for more information)



# ELECTRONIC OFFICE OPERATIONS

**In the all new 1956 edition**

## WORKSHOP FOR MANAGEMENT

- Use this new book to see how more than thirty top
- executives and management consultants save time,
- money, and personnel with electronic office systems.
- Each method, each application has been proved in
- practice. You learn exactly how to get the results—how
- to eliminate the mistakes that other companies experi-
- ence in their own electronic office operations.

**SEND FOR  
YOUR FREE  
EXAMINATION  
COPY TODAY**

Use coupon or  
Reader Service Card

**MANAGEMENT PUBLISHING CORP.**  
Suite A-23, 22 West Putnam Avenue,  
Greenwich, Connecticut

Please send me, for a 5 day **FREE EXAMINATION**, a copy of "Workshop for Management." Within 5 days I will either send payment for \$19, or return the book without obligation.

Name .....

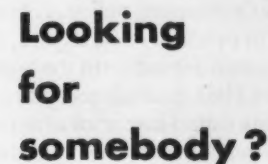
Address .....

# An exhibitor's guide to TRADE SHOW PARTICIPATION

**By William S. Orkin,  
President, Orkin Exposition Management**

**What makes an exhibitor disgruntled with a show? Why are visitors sometimes disappointed? Usually it's because the exhibitor or show management—or both—haven't faced up to their responsibilities. If you are a prospective exhibitor at a trade show or public exposition, much of your success or failure will depend on your willingness to pursue a positive, planned program. The eight points below can serve as a successful approach.**

1. **Evaluate the show.** Did the audience justify management's claims for previous years (in a new show, check management's reputation)—and is it the audience you need?
2. **Pin down your motives.** Do you want to write orders at the show, or provide institutional support for distributors? Are you doing missionary work for a new product, seeking new outlets, or bolstering a single market? Your approach at the show (and hence success) will naturally be affected by the motive.
3. **Support the exhibit to the hilt.** This means pre-show promotion and follow-up of all inquiries afterwards.
4. **Invest the time, money, and manpower** for a really stimulating exhibit. The exhibitor who merely makes an appearance because his competition is there, might as well be entering a show just to get in out of the rain. A half-hearted display can actually lose customers.
5. **Have the exhibit in working order when the show starts,** and at opening time every day thereafter. Exhibitors still uncrating when the first visitors arrive, and those whose booths are unmanned when the gates open each day, give the whole show a black eye.
6. **Avoid tasteless attention-getting tactics** such as shouting, throwing of souvenirs, and selling in front of the other fellow's booth. (They may be pulled on you.)
7. **Staff the booth with qualified personnel** who can answer visitors' questions. The wise exhibitor usually plans to have at least one top man around at all times to deal with distinguished prospects.
8. **Keep the booth business like.** That means women, children, and footsore friends will be entertained elsewhere. Many a show visitor is justifiably irritated by the social scene on which he seems to be intruding. m/m



**Here's a much easier way  
to keep track of your staff!**

Imagine the efficiency of an inter-communications system that puts you in touch with any member of your organization—in seconds.

You can have such a system *without spending a cent of capital funds!*

## FAST COMMUNICATIONS ON LEASE

A complete sound system—from the simplest telephone intercom to a large-scale internal broadcasting network—can be made to order for your specific needs. And it's yours on Stromberg-Carlson's unique *lease plan*.



**NO OBLIGATION** • Find out how you, too, can benefit from a Stromberg-Carlson sound system—already in widespread use in business, industry, schools, hospitals, hotels, ocean liners—wherever there's a need for fast, efficient internal communications.

**Mail coupon today for a free survey of your needs.**

**STROMBERG-CARLSON COMPANY**

A DIVISION OF GENERAL DYNAMICS CORPORATION  
1703 UNIVERSITY AVE. • ROCHESTER 3, N. Y.

I want to know more about how to keep track of my people. How much will your lease plan cost me? Please send a man to survey my premises and suggest a system to meet my needs. No obligation.

Company .....

Address .....

Person to see .....

(Circle 189 for more information)



**Delivered the same day!**

That's company policy... but it costs a pretty penny in overtime some days!... Because the drivers have to stall around until the orders in the morning mail are filled, packed, ready to go!... The company would save a lot of expense, and more drivers get home on time to dinner... if the office put in the new PB MailOpener!

The MailOpener trims a hairline edge off an envelope without injury to contents... can open up a whole morning's mail in a jiffy... is a real economy in any business because it gets incoming mail in action without loss of time! Hand and electric models for any office, large or small. Call your nearest PB office, or write for free illustrated folder!



**FREE:** Handy chart of Postal Rates, with parcel post map and zone finder.

**PITNEY-BOWES MAILOPENER**

PITNEY-BOWES, INC., 4557 Walnut St., Stamford, Conn.

...originators of the postage meter... offices in 94 cities in U.S. and Canada

(Circle 130 for more information)



Hand Model LH

Just ask the gal who uses one!  
**modern - efficient**

**Cramer**

**SECRETARIAL CHAIRS**

are instantly adjustable to proper fit by ANY USER, and with proper fit comes comfort and efficiency... are engineered with the finest features ever built into office chairs, including a patented swivel that never binds nor becomes loose or wobbly... are available in most any fabric or color and all covers are easily removed or replaced... give MANY MORE years of good service for every dollar you spend.

- 1—Spring-mounted, foam latex back rest.
- 2—Exclusive patented molded foam latex seat cushion.
- 3—Free-moving swivel; can't wobble or stick.
- 4—Easy seat height and back adjustments.
- 5—Wide choice of easy-to-remove fabric covers.



May we prove it to you?

Cramer Posture Chair Co., Inc., Dept. MM  
1205 Charlotte, Kansas City 6, Mo.

Please have a Cramer dealer call for a demonstration of Cramer Chairs in my office.

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ Zone \_\_\_\_\_ State \_\_\_\_\_

**Cramer**

CRAMER POSTURE CHAIR CO., INC.

(Circle 110 for more information)



**THE MAN**

Richard S. Boutelle  
President

**THE COMPANY**

Fairchild Engine &  
Airplane Corp.

THIS RURAL EXECUTIVE OFFICE has all the flavor of a country hunting lodge. Massive forms and textures distinguish the private office of Mr. Boutelle. The furnishings are a distinct reflection of the man, his personality, and his interests.

The office is a cantilevered section of the building, overlooking the staff swimming pool. The huge, multi-col-



MANAGEMENT METHODS



# work

SUCCESSFUL MEN



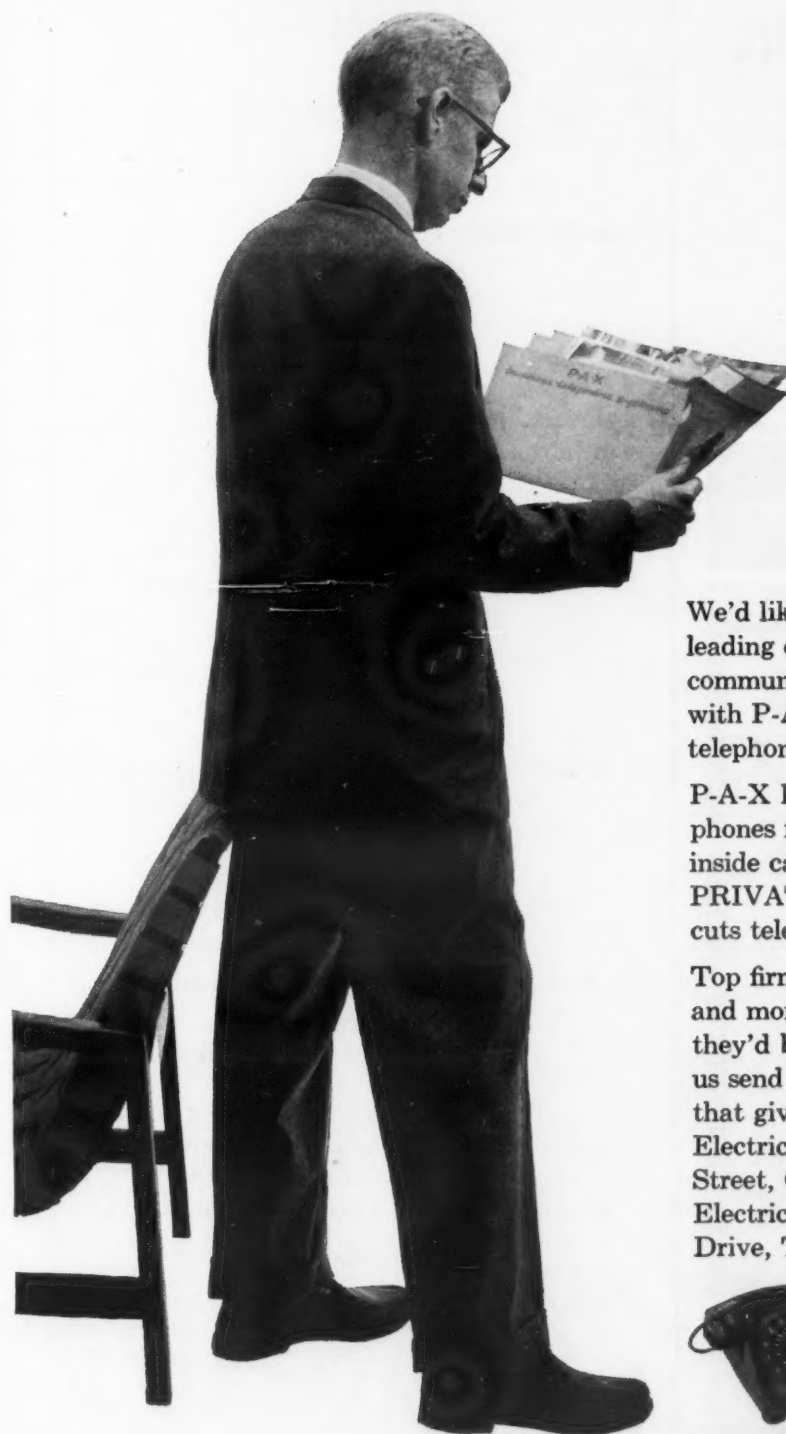
ored fieldstone fireplace is part of the cantilevered chimney.

The fireplace wall is the setting for some hunting devices, a reflection of his ardent hobby. An antique gun and powderhorn, with two decorative deer heads, adorn the rough fieldstone.

A huge bear rug, on a bare wood floor, further reflects the man's masculinity and earthiness. Large comfortable upholstered chairs, mostly in leather, are placed about the room. The wall opposite the hearth is wood panelling; the other two walls are window expanses.

Mr. Boutelle works at a simple, sturdy wood desk, facing the panelled wall. There is a basic simplicity which marks the office, with its light and dark wood, stone, leather, and glass tones. m/m

## Swap 60 seconds for an idea that may save your company thousands of dollars?



We'd like to show you how a great many leading companies have improved their communications and pocketed sizable savings with P-A-X—the "inside" business telephone system.

P-A-X keeps your present switchboard and phones free for outside calls. Lets you make inside calls in a flash—**OVER YOUR OWN PRIVATE TELEPHONE SYSTEM**. Sharply cuts telephone operating costs.

Top firms in all industries save time and money with P-A-X—in fact, they tell us they'd be in a jam without it. See for yourself. Let us send you an interesting Case History File that gives facts and figures. Write: Automatic Electric Sales Corporation, 1033 W. Van Buren Street, Chicago 7, Ill. In Canada: Automatic Electric Sales (Canada) Ltd., 185 Bartley Drive, Toronto. *Offices in principal cities.*



**P-A-X** business telephone systems

**AUTOMATIC ELECTRIC**

Originators of the dial telephone • Pioneers in automatic control



(Circle 158 for more information)

## TOPS IN EFFICIENCY AND VERSATILITY



### EMMERT DRAFT-RIGHT UNITS

EMMERT Draft-Right Units bring to the drafting room the ultimate in versatility and efficiency.

These attractive, all-steel units provide the operator with everything needed, instantly available without rising from the chair — drafting instrument . . . adjustable, counter-balanced drawing board . . . reference area . . . tool and storage space.

Versatility in arrangement is provided, too. EMMERT Units may be assembled in either right or left hand arrangements. Change-over from right to left may be accomplished easily by your own personnel.

Finished in a rich grey with mist green linoleum tops, these units blend perfectly with any color scheme.

Write Department M for Bulletin No. 800

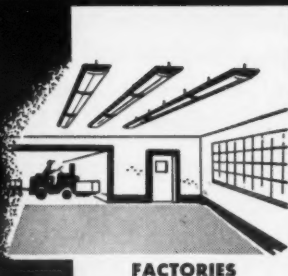
**EMMERT** DRAWS THE ACCURATE LINE

EMMERT MANUFACTURING COMPANY  
WAYNESBORO, PENNSYLVANIA

(Circle 113 for more information)

## FAST DRYING LUMINALL CONCRETE FLOOR PAINT

Decorates and preserves interior and exterior concrete floors, patios, primed wood porches and decks. Dries dust-proof in 40 minutes, walk-proof in an hour, traffic-proof overnight! Fast, easy application with brush, roller, floor brush. No special washes or etching needed. Nonflammable! Eight popular colors that wear like iron, last for years!



Factories



Shipping Areas

### FREE 62-CHIP COLOR CHART

Features Luminall Concrete Floor Paint, Satin Luminall and Ready-to-Use Luminall for walls, ceilings, trim; Outside Luminall for exterior masonry, asbestos shingles and siding. Write today for your free copy.



## LUMINALL PAINTS

Dept. 106B

3617 SOUTH MAY STREET - - - - CHICAGO 9, ILLINOIS  
Newark 5 • Dallas 7 • Los Angeles 1

(Circle 123 for more information)

## Report on company policies for

# LOST & FOUND

## departments

Few firms are big enough to need the services of a full-fledged lost and found department. Nevertheless, every business has to provide some sort of "picking up after them" service.

A recent survey of 20 member companies of the Associated Industries of Cleveland discloses some of the more popular methods. None of the 20 firms involved has a lost and found department, but each has developed a technique for dealing with both the finders and the losers.

### What department handles the articles?

- Personnel . . . 9
- Plant protection & police . . . 9
- Safety director . . . 1
- Miscellaneous . . . 1

### Where are the found articles advertised?

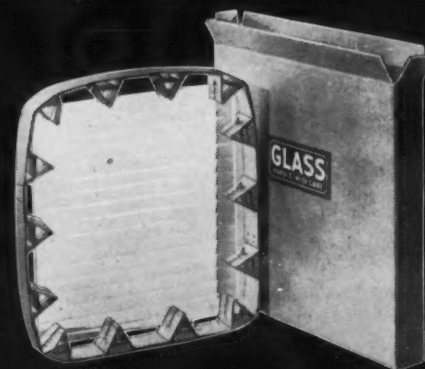
- Bulletin board . . . 14
- Company newspaper . . . 3
- Both . . . 1
- Miscellaneous (public address system, special inquiry, etc.) . . . 3

### How are unclaimed articles disposed of?

- Held indefinitely . . . 7
- Everything claimed . . . 6
- Returned to finder after specific period of time . . . 6
- Turned over to a welfare fund after a period of time . . . 3
- Thrown away after a period of time . . . 3



## IN-CARTON *Suspension* reduces glass breakage



**Vertical-Horizontal** suspension safeguards your product in and out of carton . . . Fewer packaging components required . . . pad folding eliminated.

SUS-RAP is engineered to your product and pretested by N.S.T. procedures

**SUS-RAP**

Laboratory Developed and Tested Packaging

VANANT COMPANY, INC. 954 S. Water Street Milwaukee 4, Wis.

(Circle 143 for more information)

## "Doll" or Dud?

Count BOTH . . . and 1,001 other items with

## VARY-TALLY

Multiple-Unit  
Reset Counter



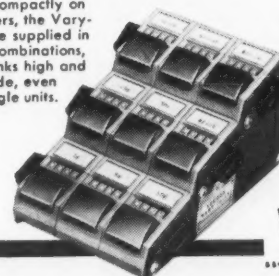
Using Vary-Tallies is the fast, accurate way to separate the turnover items from the "turkeys" in sales . . . the rejects from the okays in production — size by size, color by color, flavor by flavor, price by price. Because you count, you KNOW. Because you know, you COUNTROL. Tell us what YOU want to count.

Arranged compactly on stands in tiers, the Vary-Tally can be supplied in any of 66 combinations, up to 6 banks high and 12 units wide, even down to single units.

• All Parts Corrosion-Resistant; Working Parts of Hardened Steel

• Individual Tag Above Each Counter-Window — Not Strip Tabs

• Easily Readable from Any Angle . . . Bold Figures Always Centered in Window . . . No Glare



**VEEDER-ROOT INC.**  
HARTFORD 2, CONNECTICUT  
"The Name That Counts"

Chicago 6, Ill., New York 19, N. Y., Greenville, S. C., Montreal 2, Canada  
Offices and agents in other principal cities

(Circle 144 for more information)

MANAGEMENT METHODS



# How General Foods prevents accidents — by predicting them

by Andrew J. Deile, Manager  
Training Division for Personnel Administration  
General Foods Corporation

**Charts based on quality control concept put the finger on danger areas before serious mishaps can occur**

If you know when your next serious accident is likely to happen, you've got a chance to prevent it. At General Foods, we predict accidents with a chart similar to those used in statistical quality control procedures.

The system is based on two concepts. First, it is statistically practicable to establish a normal accident rate. Secondly, minor and near-accidents must be considered to chart true predictability. Normally, safety records do *not* in-

clude these factors. They are based exclusively on records of time-loss accidents. By employing our system, we've been able to substantially reduce our accident frequency rate.

We adapted the theory of quality control charting to serve our needs. In quality control charting, we start with a base line representing no rejects. Two control limits are then determined: the minimum and the maximum expected number of rejects. The rejects are

plotted. If the number of rejects in relation to number of units produced stays within two limits, the situation is considered "normal." A rate of rejects falling within this range is considered due to chance. But, if the rate goes beyond either of these limits, the increase is probably due to an "assignable cause," and the quality control man sets out to find it.

This principle of determining when defects (accidents) are due to more than just chance fluctuation, is one that can be applied to safety work.

## Setting up the Chart

First you determine your safety average. Take a typical year as the "base year." To get your base line, figure how many accidents there were per 10,000 manhours worked that year. Include all accidents, minor ones as well as lost-time injuries. (The ideal system is to chart near-accidents too; but, practically speaking, you can't collect accurate records on those.)

Let's set up a hypothetical example. Say that last year was an average one at your location. If one million manhours were worked, with 4212 injuries reported, the base line is 42.12 accidents per 10,000 manhours.

Then figure out the normal fluctua-

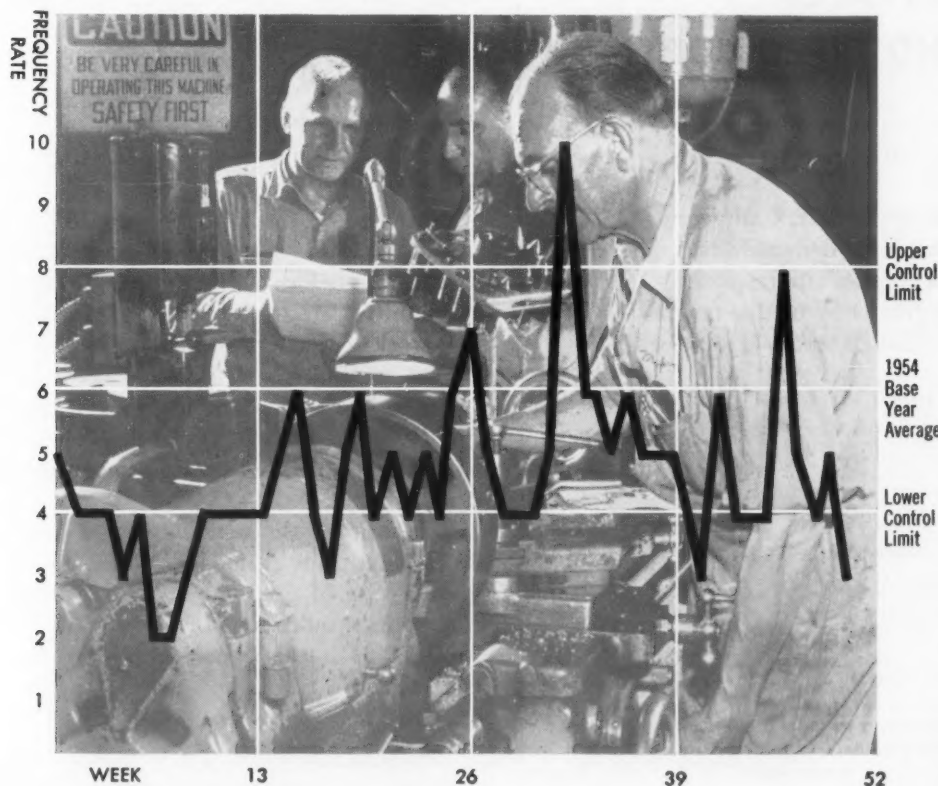


Figure 1. This is the Accident Control Chart for the Maxwell House Division in Hoboken. It illustrates the frequency rate for the year of 1955.



## PAYCHECK "OUTLOOK" ENVELOPES

Eliminate Time and Expense of Addressing, also chances for Errors. Paycheck "Outlook" Envelopes are absolutely opaque. Essential when wages are paid by check. Nothing shows but the employee's name. This improves personnel relations.



Send for Samples and Prices Today

**OUTLOOK ENVELOPE CO., Est. 1902**  
Originators of "Outlook" Envelopes  
1001 W. Washington Blvd., Chicago 7, Illinois

(Circle 160 for more information)



You'll find it faster with

**Oxford**  
**PENDAFLEX®**  
HANGING  
FOLDERS



Desk Drawer File contains 25 Pendaflex hanging folders. Changes desk data reference from so slow to quick pick!

Clip coupon for catalog, name of dealer

☐ Oxford Filing Supply Co., Inc.  
7 Clinton Road, Garden City, N. Y.

Name

Address

City, State

(Circle 128 for more information)

**Now  
make  
positive  
offset  
plates  
in  
90 seconds**



**without costly equipment**

**NEW, LOW-COST OZALITH PLATES  
REPRODUCE DRAWINGS, FORMS, AND TYPED COPY!**



Use *any* ultraviolet light source to make new Ozalith plates—whiteprinter, simple exposure box, vacuum frame. Copy *any* translucent original—written, printed, typed or drawn. 90 seconds is all it takes!

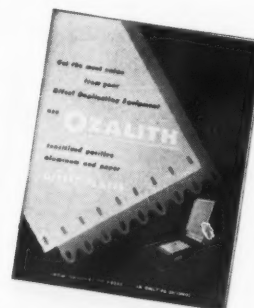
Cost? As little as 22 cents per 10" x 16" paper plate—so inexpensive you won't have to file plates. Simply make another, *in seconds*, from your translucent original.

Ozalith plates give you top-quality offset reproduction. They take ink well... give you clean, sharp impressions.

Try Ozalith platemaking yourself. Call your nearest Ozalid distributor for a demonstration—with your originals. His number's in the phone book. Or write for your *free* copy of this new illustrated brochure to: Ozalid, Dept. J-7, Johnson City, New York.



(Circle 129 for more information)



Product of Ozalid Division  
General Aniline and Film Corporation  
In Canada:  
Hughes Owens Company, Ltd., Montreal

tion from this average—the acceptable *standard deviation*. The formula is:

$$\text{Standard deviation} = \sqrt{\frac{C}{U}}$$

$$C = \frac{\text{Total no. of accidents for year}}{52 \text{ (weeks of year)}} = \frac{4212}{52} = 81$$

$$U = \frac{\text{Total man-hours worked}}{52 \times 10,000} = \frac{1,000,000}{520,000} = \frac{100}{52}$$

Therefore:

$$\text{Standard deviation} = \frac{\sqrt{81}}{100/52} = 9 \times 52/100 = \frac{468}{100} = 4.68$$

Experience has shown that two deviations are the best for statistical control in safety work. So you double the 4.68 and add 9.36 to your base of 42.12. This gives you an upper control line of 51.48 accidents per 10,000 manhours. By subtracting twice the standard deviation from the base line, you get a lower limit of 36.76. Since in safety your goal is no accidents, you need only worry about exceeding the upper control line. Breaking through the lower control line is good; your safety efforts are producing results.

When you do get a record that goes below the control line, it's time to borrow another technique from quality control. A significant reduction in accidents isn't due to just chance. Find out what changes have taken place to cause it. If you can make the change a permanent one, you can make the improvement in safety a permanent one.

#### Weekly plotting

Once your chart and control limits are set up, you must keep track weekly of the number of accidents per 10,000 manhours. Using this example, if in the first week of charting your plant worked 20,000 manhours, and you had 88 accidents, this is equivalent to 44 accidents per 10,000 manhours. In that case, you would be well below the upper control limit.

But suppose the next week you had 104 accidents for 20,000 manhours. This gives a rate of 52 accidents per 10,000 manhours—you're outside the control limit. This is the signal—it is time to act, and quickly.

#### Interpreting the chart

When your graph goes above line,



How to  
keep fully  
informed  
about  
**ELECTRONIC  
DATA  
PROCESSING**  
with a  
minimum amount  
of reading



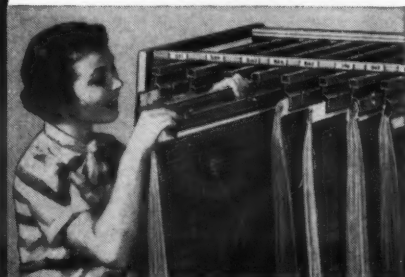
**Data Processing Digest** is a monthly service containing carefully prepared abstracts on management's newest tool—Electronic Data Processing. Each month DPD editors review articles from more than 80 magazines and books in this important field. You get the facts and key ideas from the articles... enabling you to keep up to date on this increasingly important field for only a few minutes' reading time *once a month*. References are provided should you want to read the complete article.

**FREE copy of current abstracts!**

Let us send you a free copy of the current release and a list of the publications regularly reviewed. We know you will want to receive **Data Processing Digest** regularly. One year's service (12 monthly issues) costs only \$24.00. Send name and address today.

**CANNING, SISSON and Associates**  
914 South Robertson Blvd., Los Angeles 35, California  
(Circle 167 for more information)

## Glider BLUE PRINT RACK



Patents Pending  
5 Ft. Hi., 4 Ft. Wd., 3 Ft. Dp.

**\$94.50** F.O.B. Chicago, Ill.

per Unit including 12 Plan Holders

**20 Exclusive Features including**

- No Holes to Punch... Replace Any Sheet without removing other sheets.
- Just Glide In... Glide Out.
- Holds Various Sizes of Prints and Thicknesses of Sets
- Can Hold as Many as 1500 Prints
- PLUS 16 MORE FEATURES

Order Your Glider  
Blue Print Rack Today  
or Write for Illustrated Brochure

**MOMAR  
INDUSTRIES**

4323 W. 32nd St., Chicago 23, Ill.

(Circle 166 for more information)

JULY 1956

you've got a warning. But that's all it is. It tells you that something has gone wrong, but it doesn't tell you what. You have to find out which of many possible causes is giving you trouble. It's up to you to take the warning and follow through.

Also, you can't rely on the chart alone. It's just one more tool to use along with the others in your safety kit. But it is a tool that's easy to use and one that offers several advantages:

► **CONCRETE PROOF OF HAZARDS.**

You don't have to walk into a safety meeting with the vague warning: "*Boys, accidents seem to be going up. We should be doing something about it.*" You walk in and say: "*Accidents have reached the danger point. We have to do something about it.*" You know which approach will get better results.

► **AUTOMATIC WARNING.**

When the chart line goes above the upper control limit, you've got an automatic red flag. You don't have to wonder about "*Should we do something?*"

► **EARLY WARNING.**

Besides being automatic, your danger signal is early. Instead of suddenly being shocked out of complacency by a serious injury to an employee, you get some advance notice on your odds. You have a little extra time to work on preventing the serious accident that might take place tomorrow.

**An example of operation**

It's difficult to prove that tomorrow's accident could have been prevented. But there's a good example in General Foods on how it can work. Maxwell House started using this charting approach in some plants in 1951. The division's frequency rate for lost-time accidents for 1950 was 6.19—above the corporate average of 5.52. Starting with the first year of use of weekly charts, Maxwell House went out ahead of the corporate record and has stayed there ever since. Of course it's not the charts that did it. It's the safety efforts of the people at Maxwell House.

For example, the automatic "red flag" went up at the Hoboken plant during the week of August 28, 1955. (See Figure 1). What was wrong? What



## Typist pool in plastic...

Are there times when you wish Miss Tootle were twins, or even quintuplets?

Get CORMAC! This new small photocopier can make copies faster than a flock of Miss Tootles can type!

And much more cheaply. Saves work for Miss Tootle, too. And is always there when you want it.

Newest, lightest, most compact, and most versatile of copying machines, CORMAC makes a true photographic copy in a few seconds, for a few cents. Reproduces almost anything—handwriting, typing, print, drawing, photograph, and color! Works in any light, without



heat, odor, or extra processing.

Can be used by anybody. And so light it can be moved easily from place to place.

CORMAC copies of letters, contracts, statements, plans, orders, tax forms—save time, speed work, cut costs. Has innumerable uses. Even a small office can afford one. CORMAC is one of the best looking office appliances you ever saw—housed in beautiful, durable, soil-proof French grey plastic with white trim. Made in the USA, and backed by a *lifetime guaranty!*

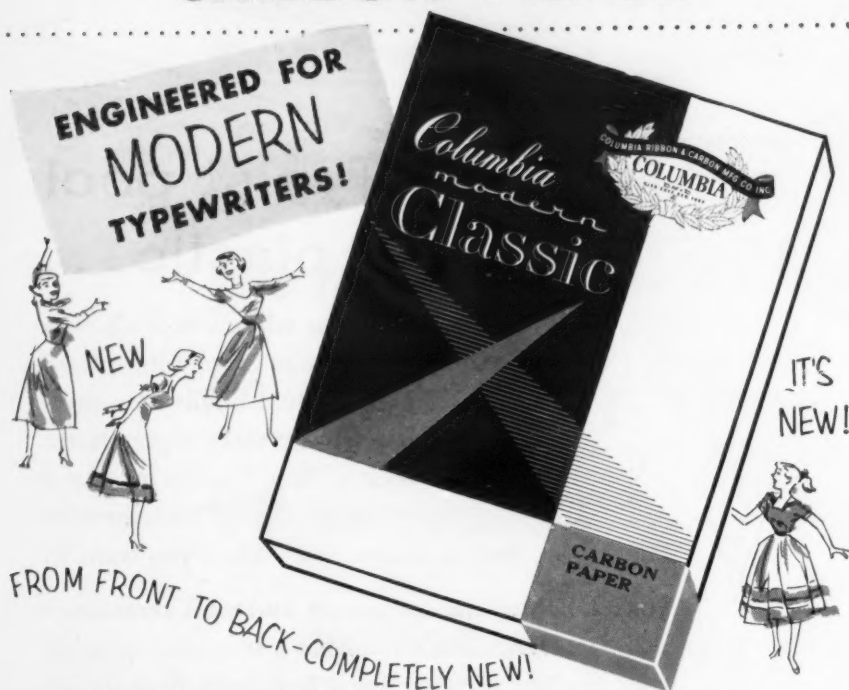
Ask the nearest dealer to show you.  
Or write for booklet and prices to  
CORMAC Industries, Dept. 31, 80 Fifth  
Avenue, New York City... You'll be glad!

# CORMAC

(Circle 172 for more information)



# modern Classic CARBON PAPER



From the new *smudge-proof* carbon coating to the new *shock-proof* back, modern Classic Carbon Paper is engineered to meet the more demanding requirements of modern typewriters.

With either electric typewriters or recent manual machines, modern Classic Carbon Paper produces a new *sharpness* of write and *uniformity* of appearance—truly the ultimate in carbon copies.

The scientifically formulated carbon coating is *deep dyed* to form a permanent bond with the paper stock fibers. The carbon is transferred *only* by impact of the type face to produce *permanent*, *smudge-proof* characters. Micro-blended for absolute smoothness, this new coating assures complete uniformity of upper and lower case characters.

The *shock-proof* back softens the *jarring action* of high-speed electric typing—the cause of unevenness produced by ordinary carbons. Only the exact amount of carbon necessary to create a sharp, full-bodied image is released. For carbon copies that you'd be proud to send to anyone, specify *Modern Classic*—the carbon paper designed for modern typewriters. Columbia Ribbon and Carbon Manufacturing Co., Glen Cove, N. Y.



**FREE GUIDE!** For your free copy of our new "Carbon Paper Facts" type make and model of your typewriter and the number of carbon copies normally required on your company letterhead and mail with coupon.

**MODERN CLASSIC  
CARBON PAPER**

by

**Columbia**

COLUMBIA RIBBON & CARBON MANUFACTURING CO., Inc.  
597A Herb Hill Road, Glen Cove, N. Y.

Rush free—"Carbon Paper Facts."

Name \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ Zone \_\_\_\_\_ State \_\_\_\_\_

(Circle 153 for more information)

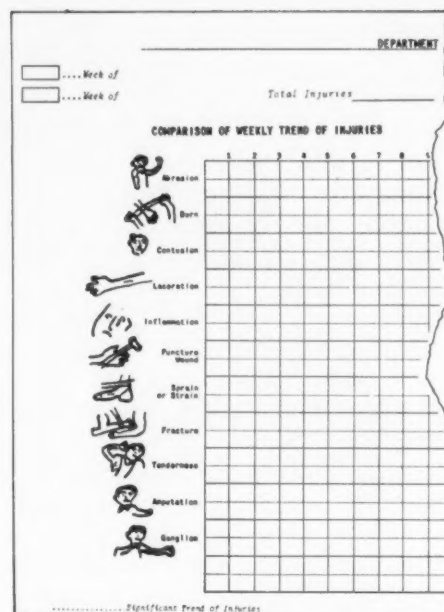


FIGURE 1. This form, when completed, graphically shows the weekly trend by types of injuries.

could be done? An immediate review of the "Comparison of Weekly Trend of Injuries" (Figure 2) revealed that the predominating injuries were typed as "lacerations." A number of employees had reported to the Medical Department with cut fingers, palms, and forearms. The injuries originated at the loading platforms and at the blending stations.

This information was immediately brought to the attention of the Supervisors concerned. They, subsequently, inspected the operations in question. Inspection revealed that: (1) the men on the loading platforms were not wearing gloves when handling the bindings in freight cars, (2) blenders were using knives in an unapproved manner to open bags of green coffee.

An immediate retraining schedule was applied to these operations. All personnel on the loading platforms were cautioned on the necessity of wearing protective gloves. The blenders were retrained in the proper procedures to open the bags of green coffee. The action was so fast and the retraining so effective that the accident rate dropped to the base line average in one week.

The continuing application of this procedure to each new show of danger in the weekly report of accidents has paved the way for Maxwell House to reduce and keep in check their accident rate. m/m

(Advertisement)

## Home Study Course In Programming Business Computers

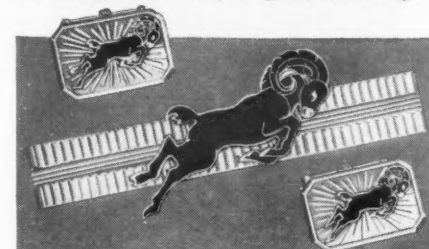
A home study course, the first and only one of its type, is being offered by Business Electronics Inc. Designed for people without technical training or experience, it is based on a similar course members of the firm developed and are teaching at a large University. Students are taught to develop and program electronic systems for business problems such as Payroll, Accounts Receivable, Inventory Control, etc. for a theoretical electronic computer called BEC.

BEC was designed for instructional purposes and includes the best elements of commercially available computers. The knowledge the student gains from BEC can be applied to any computer. "Programming for Business Computers" provides an opportunity for the student to study at home at his own convenience for only a few cents a day.

Free brochures describing the course are available upon request from Business Electronics Inc., Educational Division, P.O. Box 3330 Rincon Annex, San Francisco, Calif.

(Circle 151 for more information)

*Old or New...*  
**emphasize your product  
with an I & R Creation!**



Yes... whether your product is an old established one or a spanking new one, there's an I & R Jewelry Creation to feature it on. We specialize in gift awards for every occasion with whatever insignia or design you wish. Why not write us today and let us know what you have in mind.

Free illustrated folder on request.

**IRONS & RUSSELL COMPANY**  
INDUSTRIAL DIVISION

Emblem Manufacturers Since 1861  
95 Chestnut Street, Providence, R. I.  
(Circle 173 for more information)

MANAGEMENT METHODS



## paper work management

# Unique billing system

## cuts costs and meets expansion needs

A unique service agreement billing system, used by Marchant Calculators, Inc., of Oakland, Calif., has been responsible for a savings of about \$30,000 a year in clerical and paper costs.

The new method, worked out by Clarence H. Schaefer, controller, and his staff, utilizes two heavy duty duplicating machines and a specially designed master. It replaces a system which required individual typing of invoices and retyping of automatic renewals.

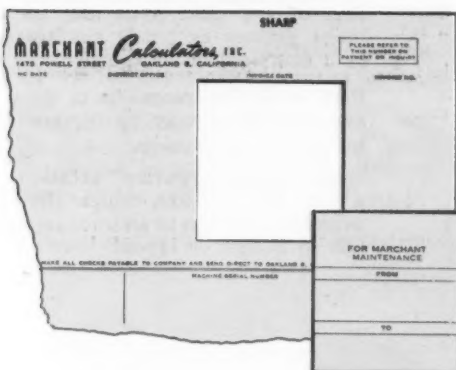
The upper half of the 8½" x 14" master contains space for the listing of specific invoicing instructions. In the upper right hand corner a die-cut two-inch square opening fits over a typed insert that is taped to the drum of the duplicating machine. This insert reproduces the invoice date and the period of the agreement billed.

### How it works

The master is clamped to the drum of the duplicating machine with the opening fitting over the typed insert. The invoices are then run from each master in a continuous operation for the entire group of masters that must be billed for that date.

As each new service agreement, which is a contract for the care and maintenance of a newly purchased office machine, is received, the duplicating master is prepared on a typewriter. It is then checked, folded in half to invoice size (8½" x 7") to protect the carbon, and filed by billing dates. All duplicating masters of the same billing date and period of agreement are run off and filed together.

The die cut insert provides space for variable service policy information.



The auditing of the invoice before mailing is limited to special billing requirements, since the master is checked when typed originally. Minor corrections or changes of items on the duplicating master are made by using correction tape, which eliminates retyping.

### Volume Billing

The company estimates that about 1,000 invoices are prepared each working day, or about 20,000 a month. The need for the new billing system was brought on by an almost 100% increase in sales volume during the past five years.

An analysis of the service agreement involved showed the annual renewals were largely automatic and were mostly a repetition of the year before. The small percentage of changes made each year were, in most cases, because of a change in the date and period of agreement.

After deciding to use the stencil, spirit duplicating method of producing invoices, a method of reproducing the variable invoice date and the period of the agreement was sought.

The conventional method is to insert a small strip master in the clamp of the duplicating machine with the regular master. The strip master then covers over the old variable information and permits the duplication of the new variable information very quickly.

### Localizing variables

In the Marchant system, the variable information is localized on the master and in the invoice set. This space is die-cut out of the master, leaving the two-inch square "window" in which any number of variable inserts can be used.

When a group of invoices has been run through, a distribution clerk checks the file of duplicating copies and the masters to see that special billing requirements have been met, she distributes the invoice copies, and returns the masters to the file. They are taken out again when the next billing date occurs.

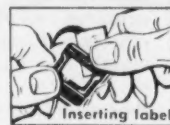
The new method has reduced clerical costs for that particular operation about 40%, and the cost of paper and printing about 25%. m/m

## Smith's OPNWINDO Steel Guides



The only guide that stays firmly in place on acetate cover sheets in your sales manuals, catalogs, etc.—yet can be moved quickly and easily if you want to change the indexing. Enables sales personnel to find instead of fumble.

Hundreds of other office uses to save time, improve filing. Available in 1" or 2" widths; packed 25 to box with labels in strips for easy typing. Also alphabetic labels to 200 subdivisions.



See your office supply dealer or write

**CHARLES C. SMITH, INC.**  
EXETER, NEBRASKA

For more than 50 years a complete line of time-saving signals and indexes

(Circle 138 for more information)

## BORED?

... with those tired-looking letterheads of yours? If you're jealous every day over the handsome letterheads that come across your desk ... here's an easy way to make sure that any change you make will be a change for the better. The Rising Paper Company, makers of "Fine Paper At Its Best" offers you a unique service at absolutely no cost to you. It will be happy to send you a portfolio of "New Letterheads of the Season" ... culled from the leading printers, coast-to-coast. Here's your opportunity to determine just exactly what style of letterhead is best suited to your own individual business. Choose your sample ... it will show your printer exactly what you have in mind. For your free copy of "New Letterheads of the Season" ...

Circle Number 135

on the Reader Service Card  
for more information

(Circle 135 for more information)

# searching

**FOR  
TEMPORARY  
HELP?**

# call

**MANPOWER, INC.**

FOR  
**TYPISTS • STENOS  
GENERAL OFFICE WORKERS**

Our employees will work in your office or ours for any length of time from 4 hours, to a day, a week or longer at low hourly rates.

Call the Manpower, Inc. office in your city — operator B — for fast, economical service!

We are not an employment agency.

**manpower, Inc.**

330 W. Kilbourn  
Milwaukee, Wis.

THE RECOGNIZED LEADER IN THE  
TEMPORARY HELP FIELD

75 Offices Coast-to-Coast

(Circle 159 for more information)

# official entry blank • 3rd annual "BEST PLACE TO WORK"

## GENERAL INSTRUCTIONS

These awards are not concerned with merely "beautiful" offices. They are designed to demonstrate how well-planned, well-integrated quarters improve both employee and executive productivity and morale.

Why they are called the "BEST PLACE TO WORK" Awards

In recent years various research projects have proved that high employee productivity and good employee morale go hand-in-hand. People want to be productive. People want to be proud of their job and their company at whatever level they work.

But well-trained employees—and superior office machines—don't assure high productivity. Men and machines don't work in a vacuum. The environment in which men and machines operate has a direct and measurable effect on their output. For this reason, employees and executives reflect, in personal efficiency, the efficiency level of the physical quarters in which the business itself is conducted.

How award-winners will be selected

Specific criteria are suggested in the "Check List" on the next page.

In general, however, the judges will base their decisions on the over-all practicality and good planning principles observed by the entries.

In your written answers try to show what management and the designer had as an objective, why they felt the objective was important, and how the design and layout of the office or special area attained the objective.

## SEND ENTRIES TO:

Contest Editor  
Management Magazines, Inc.  
22 West Putnam Ave.  
Greenwich, Conn.

## CHECK CATEGORY YOU ARE ENTERING

Your entry will automatically be reviewed by the judges for possible consideration in categories other than the one you specify. You may also enter more than one category, yourself, if you so desire. A company's offices may be entered in several categories.

## TWO MAJOR AWARDS

Best integrated general offices—small firm—offices now occupied by a firm with fewer than 100 office employees. ☐

Best integrated general offices—large firm—offices now occupied by a firm with more than 100 office employees. ☐

## 8 SPECIAL AWARDS

Best general offices in a suburban location—offices for a firm of any size. ☐

Best branch office—in a firm of any size. ☐

Best executive office or suite—for one man or for a group of executives whose offices are adjacent to one another. Any size firm. ☐

Best clerical work center—may be a single department or the entire clerical operation in a firm of any size. ☐

Best employee lunch lounge area—in a firm of any size. Entry may be of separate lunchroom, lounge, cafeteria, coffee bar, or a combination of any of these areas. ☐

Best board or conference room—in a firm of any size. Area may be for large groups or small conferences, or a combination of the two. ☐

Best reception room—in a firm of any size. Area may be for multiple use or reception only. ☐

Best "special situation" solution—in a firm of any size, which shows a practical solution to an unusual problem in design or layout. ☐

Please fill in all blanks

Name of company whose offices are discussed

Address

City and State

Type of business

Approximate number office employees in offices discussed

Name of individual submitting entry

If an employee of above company, give title

If not an employee give professional title (i.e., architect, designer, etc.)

Address

City and State

Category entered

No. of photos, sketches, plans attached

## CHECK LIST

The reason for using or planning some or all of the factors or services below should be reported in each entry, regardless of the category you are entering. Obviously, not all of the items listed will be pertinent in every category.

- |                                      |   |                                  |
|--------------------------------------|---|----------------------------------|
| 1) Traffic flow                      | 7) Lighting— <i>a)</i> foot candle levels | 13) Wall covering                |
| 2) Work flow arrangement             | <i>b)</i> type of fixtures                | 14) Floor covering               |
| 3) Space saving ideas                | 8) Sound control                          | 15) Maintenance                  |
| 4) Square footage of areas discussed | 9) Heating and air conditioning           | 16) Safety measures              |
| 5) Construction technique            | 10) Color conditioning                    | 17) Communications equipment     |
| 6) Partitioning                      | 11) Furnishing                            | 18) Rest facilities              |
|                                      | 12) Decor                                 | 19) Special mechanical equipment |

## DESCRIPTION

Give complete details. If describing a picture attached, please key picture and copy. Use Check List to avoid omitting pertinent information. See section "How award winners will be selected".

Last chance — contest closes July 20th, 1956



## RULES

- 1) Select the category or categories you are entering from the award listing shown at left. If you want to enter more than one category fill out separate entry blanks for each category. You may use the same photographs for one or more entries, however.
- 2) Entries may be submitted by an executive or department manager in the company whose offices are described, or by the company's architect or office designer.
- 3) Elaborate presentations are not necessary. Photographs or snapshots—and plan drawings when pertinent—will be required. Sketches, in lieu of photographs, will be accepted.
- 4) Offices described in entries must be occupied, not projected. If changes in layout have been made since photographs were taken, these changes should be described. New photos or sketches will not be required.
- 5) Appropriate wall plaques will be presented to the companies and designers whose offices are award-winners.
- 6) Plaques for winning entries will go to the architect or office designer, if one was used in planning the offices involved. If no outside professional consultant was used, and if the planning was done by staff employees, the distribution of the designer's plaques will be left to the discretion of a company officer or department manager in the company whose offices won the award.
- 7) Management Magazines, Inc., reserves the right to publish all material entered, whether or not it is award-winning. Right is also reserved to give no award in specific categories where the judges feel the quality of the entries does not merit an award.
- 8) Material that has been published previously will be acceptable.
- 9) MANAGEMENT METHODS will endeavor to return any material and photographs submitted if such requests accompany the entries.
- 10) All entries must be mailed on or before July 20, 1956.

## diagnostics

FOR MANAGEMENT

by Leslie M. Slote

Director of Industrial Relations;  
Norden-Ketay Corporation, and  
Management and Labor Relations Consultant

question:

*Work simplification programs are installed to reduce costs and increase productivity through better and simpler methods of getting the work out. What can be done on employee motivation to sustain such programs and continue the good results after installation?*

answer:

The ability to apply and sustain a work simplification program in practice depends greatly upon the employee's ability and willingness to do the job. Effective communication and training methods, which apply not only to new employees and new job situations, but to long-time employees as well, are the best continuing means.

Good communication means that the employee is kept informed on what is expected of him, how to do the job, and how well he is performing. It also means heeding the needs of workers and helping them to understand and accept company policies and objectives. One organization I know summarizes its program as follows:

1. In getting across information, emphasize its use and application to the job.
2. Stir the learner to activity; get him to take part because actually doing the job is essential to learning. For example, help an employee to understand *what* his errors are, and *how* they may be corrected.
3. Give the worker time to master and digest what he learns; help build his confidence in his ability to do the job.
4. Emphasizing the more important, critical parts of the job enable it to be mastered more rapidly.

5. Help the employee to understand the basic reasons and philosophy behind the things he is learning.

The most challenging part of the supervisor's job is instilling the employee with the "will-to-work." Better work methods and training will improve efficiency, but they are not enough. Employee cooperation, and motivation to do his best, are the missing ingredients. There is no pat formula to guarantee results, but recent studies of supervisory practices that contribute to better production, have shown the following results:

1. Employees must be allowed a measure of freedom and latitude in performing their work. If supervision is

too close, production tends to fall off.

2. Supervisors with high production records have a closer personal interest in the well-being of their workers, than supervisors with low records.

3. Employees perform better when they share in making the decisions which affect their work.

4. Production is higher in units where supervisors spend more time in doing supervisory duties than in helping with routine, production work.

5. Supervisors who obtain good production are more interested in removing the causes for errors rather than punishing the employee who commits a blunder.

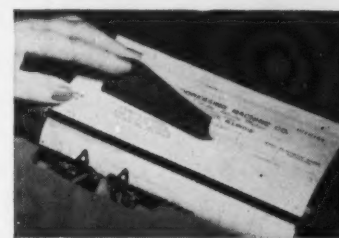
## NEWEST TREND IN PAPERWORK SYSTEMS

*Weber Stencil for addressing shipments can be cut as part of your paperwork procedure*

Two jobs must be done before your products can be shipped—paperwork must be prepared and containers addressed. Here are several modern Weber systems for tying the jobs together at savings in time and effort.

Key to the efficiency of these systems is the Weber stencil which is cut as part of your order-invoice writing procedure and becomes your shipment addressing master. This inexpensive paper stencil can be cut as a by-product of your forms writing on automatic equipment, or separately. Regardless of your paperwork procedure or equipment used, you can integrate the Weber stencil. And once it's been cut, it's ready to address labels, tags or use directly on cartons with Weber hand devices or machines.

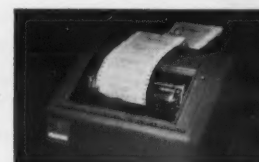
Look into the remarkable advantages of these Weber marking systems right away. See the coupon below.



**BY-PRODUCT** Weber Tab-On Stencil is tabbed over ship-to area of your invoice, bill-of-lading or shipping forms and cut as a by-product of the forms writing. In one typing, addressing master and forms are prepared with customer's address.



**CONTINUOUS STENCIL** Weber Continuous Stencils, mounted in continuous form on marginal punched carrier sheet, are cut quickly and easily on typewriter, automatic tabulating equipment, and other punched-card and tape operated machines.



**INTEGRATED DATA PROCESSING EQUIPMENT**, such as Flexo-writer (left) and Teletype (right) equipment, and other punched-card and tape operated machines cut Weber stencils as part of user's paperwork system. Stencils can be adapted to practically any modern forms procedure.

**CUSTOMER'S ADDRESS** is imprinted directly on cartons with Weber stencil hand device. This popular addressing system is fast, neat and systematic.

**Weber** Marking Systems

Div. of Weber Addressing Machine Co. Inc.,  
Mount Prospect, Illinois  
Creators of systems for addressing and marking labels, tags and containers.

**WEBER MARKING SYSTEMS • Dept. 9G,**  
Mount Prospect, Illinois

☐ Please send information on Weber Stencils and how they can simplify our shipping paperwork procedure.

Name.....  
Firm.....  
Street.....  
City.....State.....


(Circle 147 for more information)

**SITUATION WANTED!**

...in offices too noisy for ordinary movable partitions!

**SOUNDEX PARTITIONS**

soak up noise like blotters  
soak up ink...  
provide positive noise control!




Write for free catalog or see us in Sweet's AF 22a Oa

**GR Products Inc.**  
2417 EASTERN, S. E.  
GRAND RAPIDS, MICHIGAN

(Circle 165 for more information)



**Ends the Wraps Problem**

in the small or private office. Keeps wraps aired, dry and "in press"



**The OFFICE VALET**

Replace crowded "hat trees" with efficient S-6 Office Valets. Hold 6 coats, 6 hats, umbrellas and overshoes in an orderly manner—large, single or double faced units accommodate 3 or 6 persons per running foot—interlock to make racks of any length or capacity. Strongly welded of heavy gauge furniture steel, never sag, creak or wobble. Beautiful modern baked enamel finishes. Sold by leading office equipment dealers everywhere.

Write for Bulletin OV 22  
**VOGEL-PETERSON CO.**  
1121 W. 37th Street • Chicago 9, Ill.

(Circle 155 for more information)

## clippings

### NEW PRODUCTS IN THE EDITOR'S MAIL

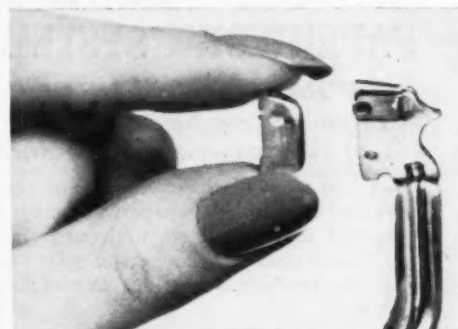
#### Translucent master sheets for accurate copying

A new rag content translucent master paper that looks like a light weight bond, easily transmits light. It reportedly can reproduce clean copies even when run fast through direct print copy machines.

It has a slightly toothy finish so it will take writing from a pencil or ball point pen. Because of its rag content, it has the strength to be handled frequently and run through the machine again and again.

For free samples, write to the Neenah Paper Co., Neenah, Wisc.; or circle number 229 on the Reader Service Card.

#### Removable, interchangeable type adds versatility to office typewriter



Removable and interchangeable type-writer type permits the typist, herself, to change one or all of the characters on her machine in a matter of minutes. In making type changes, the typist never has to touch the type with her fingers, or remove work from the machine. Using a pair of tweezers, she removes the old type block, selects a new one, and snaps it into place.

For more information write to Remington Rand: 315 Fourth Ave., New York 10, N.Y.; or circle number 243 on the Reader Service Card.

#### Remote controlled projector has varied functions

A new 16mm projection machine combines all the characteristics of a slide projector, tachistoscope, and motion picture projector. Operated by remote control, and using a horizontal feed principle, the machine can project two films simultaneously when background control of the subject matter is required. The projector is designed for use in reading, training, and other visually directed training programs.

For more information write to Perceptual Development Laboratories, 115 N. Meramee Ave., St. Louis 5, Mo.; or circle number 244 on the Reader Service Card.

## INQUIRIES INVITED

Can we help you—or your firm—print or publish, write or edit, any of the following:

HOUSE MAGAZINES  
ASSOCIATION OR CONVENTION  
NEWSPAPERS  
ANNUAL REPORTS  
COMPANY HISTORIES  
BOOKS OF PROCEEDINGS

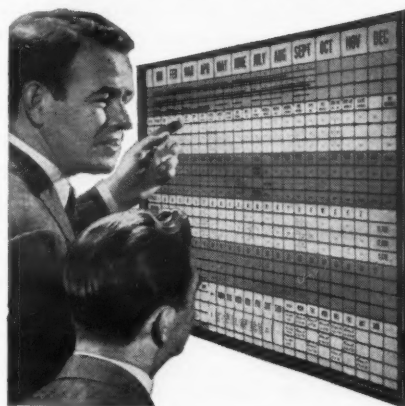
Management Publishing Corporation, a wholly-owned subsidiary of Management Magazines, Inc. (publishers of Management Methods) is now staffed to assist companies or individuals with problems requiring a high degree of professional publishing skill. The full editorial and technical resources of our parent company are available on a service fee or participation basis.

For more information, phone or write:

**RICHARD R. CONARROE**  
Director, Editorial Development

**MANAGEMENT PUBLISHING CORP.**  
22 West Putnam Avenue  
Greenwich, Connecticut  
Phone GR. 8-7330

## How To Get Things Done Better And Faster



### BOARDMASTER VISUAL CONTROL

- ☆ Gives Graphic Picture—Saves Time, Saves Money, Prevents Errors
- ☆ Simple to operate—Type or Write on Cards, Snap in Grooves
- ☆ Ideal for Production, Traffic, Inventory, Scheduling, Sales, Etc.
- ☆ Made of Metal. Compact and Attractive. Over 60,000 in Use

Full price **\$49<sup>50</sup>** with cards

**FREE** 24-PAGE BOOKLET NO. M-500  
Without Obligation

Write for Your Copy Today  
**GRAPHIC SYSTEMS**  
55 West 42nd Street • New York 36, N.Y.

(Circle 154 for more information)

## ADVERTISING INDEX

Acme Visible Records, Inc.	26
Agency: E. H. Brown	
Addo Machine Company	14
Agency: The F. W. Prella Co.	
Aero Mayflower Transit Co.	6
Agency: Caldwell, Larkin & Sidener-Van Riper, Inc.	
American Lithofold Corp.	6
Agency: Burlingame-Grossman	
Art Metal Construction Co.	39-40
Agency: Comstock & Co.	
Automatic Electric Co.	43
Agency: Proebsting, Taylor Inc.	
Charles Bruning, Inc.	13
Agency: H. W. Kastor & Sons	
Burroughs Corp.	27
Agency: Campbell-Ewald Co.	
Business Electronics, Inc.	48
Agency: Don L. Burgess Services	
Calculagraph Co.	20
Agency: Reid, Decker & Stocki, Inc.	
Canning, Sisson & Associates	47
Agency: Clyde D. Graham	
Columbia Ribbon & Carbon Mfg. Co., Inc.	8, 48
Agency: E. M. Freystadt Associates, Inc.	
Commercial Controls Corp.	4
Agency: Hutchins Advertising Co.	
Corbin Wood Products Division	37
Agency: Horton-Noyes Co.	
Cormac Industries	47
Agency: L. E. McGivena & Co., Inc.	
Cramer Posture Chair Co.	42
Agency: D. L. Goldsberry & Co.	
Cummins Business Machines	29
Agency: Waldie & Briggs Inc.	
Eastman Kodak Co.	7
Agency: J. Walter Thompson Co.	
Emmert Mfg. Co.	44
Agency: William H. Robson	
Felt & Tarrant Mfg. Co.	18
Agency: N. W. Ayer & Son, Inc.	
Filmsort Division	21
General Electric Co.	3
Agency: Young & Rubicam	
The General Fireproofing Co.	2
Agency: The Griswold-Eshleman Co.	
The Globe-Wernicke Co.	53
Agency: Strauchen & McKim	
Graphic Systems	52
Agency: Diener & Dorskind Inc.	
G. R. Products, Inc.	52
Agency: Norman-Naven, Inc.	
The Haloid Co.	31
Agency: Hutchins Advertising Co.	
Hamilton Mfg. Co.	36
Agency: Caldwell, Larkin & Sidener-Van Riper, Inc.	
International Systems & Procedures Meeting	28
Agency: The Buckley Organization	
Invincible Metal Furniture Co.	54
Agency: Klau-Van Pietersom, Dunlap, Inc.	
Irons & Russell Co.	48
Agency: Knight & Gilbert, Inc.	
Lamson Corp.	38
Agency: Chapman-Nowak & Associates, Inc.	

## MANAGEMENT METHODS



PLEASE SEND ME THE ITEMS CHECKED

July, 1956

- ☐ MANAGEMENT METHODS for one year at \$5.00  
☐ copies of THE INTEGRATED OFFICE at \$2.00 each: 1955—1954  
☐ WORKSHOP FOR MANAGEMENT at \$19.00 each  
☐ Payment enclosed ..... Bill me ..... Bill my company

Name .....

Title .....

Company .....

Address .....

City ..... Zone ..... State .....

No. employees in rm ..... Type of business .....

ORDER FORM

FIRST CLASS  
PERMIT No. 337  
(Sec. 34.9, P.L.&R.)  
Greenwich, Conn.

**BUSINESS REPLY CARD**  
No Postage Stamp Necessary if Mailed in the United States

3c.-POSTAGE WILL BE PAID BY—

MANAGEMENT MAGAZINES, INC.  
22 West Putnam Avenue  
GREENWICH, CONN.





Luminall Paints .....	44
Agency: The John Marshall Ziv Co.	
Management Publishing Corp. ....	52
Manpower, Inc. ....	49
Agency: Fromstein & Levy	
Momar Industries .....	47
Agency: The Lovitt Co.	
Moore Business Forms, Inc. ....	16, 17
Agency: N. W. Ayer & Son, Inc.	
The McBee Co. ....	10
Agency: C. J. LaRoche & Co.	
National Cash Register Co. ....	24
Agency: McCann-Erickson, Inc.	
Outlook Envelope Co. ....	45
Agency: Arthur C. Barnett	
Oxford Filing & Supply Co. ....	45
Agency: Joseph Reiss Associates	
Ozalid Division .....	46
Agency: Benton & Bowles, Inc.	
Pitney-Bowes, Inc. ....	12, 22, 42
Agency: L. E. McGiverna & Co., Inc.	
Recordak Corp., Subsidiary of Eastman Kodak Co. ....	23
Agency: J. Walter Thompson Co.	
Remington Rand Products .....	9
Agency: Leeford Advertising, Inc.	
Rising Paper Co. ....	49
Agency: Gordon F. Baird	
Rudd-Melikian, Inc. ....	38
Agency: Gray & Rogers Advertising	
Security Steel Equipment Corp. ....	32
Agency: Kenyon-Baker Co., Inc.	
The Shaw-Walker Co. ....	35
Agency: J. Walter Thompson Co.	
Charles C. Smith, Inc. ....	49
Agency: Ayres, Swanson & Associates, Inc.	
Stromberg-Carlson Co. ....	41
Agency: Charles L. Rumrill & Co., Inc.	
Tab Products Co. ....	22
Agency: H. M. Leete & Co.	
Travelletter Corp. ....	19
Agency: Woodward & Byron	
Underwood Corp. ....	5
Agency: Brooke, Smith, French & Dorrance, Inc.	
Vanant Co. ....	44
Agency: Van Handel Advertising	
Veeder-Root, Inc. ....	44
Agency: Sutherland-Abbott	
Victor Adding Machine Co. ....	25
Agency: John W. Shaw Advertising, Inc.	
Vogel-Peterson Co. ....	52
Agency: Ross Llewellyn Inc.	
Wassell Organization, Inc. ....	41
Agency: James R. Flanagan Advertising	
Watson Mfg. Co., Inc. ....	37
Agency: Griffith & Rowland Advertising	
Weber Addressing Machine Co. ....	51
Agency: Stoetzel & Associates, Inc.	
Wellington Sears Co. ....	34
Agency: Ellington & Co., Inc.	
Workshop for Management .....	41

# GLOBE-WERNICKE

**makes filing**

**and finding a pleasure...increases office efficiency**



**HERE'S HOW:** You keep in touch with your records the quick, accurate and easy way with sensible SAFEGUARD, Globe-Wernicke's universal filing system. It eliminates once and for all the needless irritation and wasted time caused by inefficient files.

**HERE'S WHY:** Because Safeguard's logically-indexed, color-coded tabs provide your personnel with "visual landmarks" to help them file and find material instantly. Unlike other systems, Safeguard is not complicated and does not require expensive training and supervision.

If you have ever wasted precious minutes waiting for a filed record, it will pay you to learn more about Safeguard. Your Globe-Wernicke dealer has trained personnel who will gladly assist you. At no obligation, call him\*, or write us direct, Dept. F-7



\*Dealers are listed in "Yellow Pages" under "Office Furniture."



(Circle 12 for more information)

**Your office  
comes to life**



Invincible executive suite  
in Driftwood Tan



The General Office



The School Office



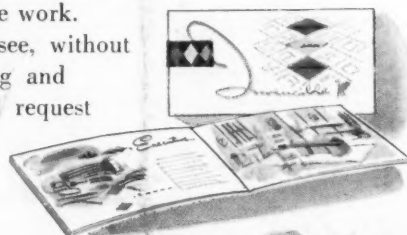
The Operating Executive

**with metal furniture by INVINCIBLE  
business-engineered in color**

*Wouldn't you like a custom-planned office like this?*

Scores of office suites and groups are now possible with Invincible's *complete new line!* You choose from six handsome, functional finishes. You custom-plan with beautifully equipped all-steel units for your work and space requirements. And from then on you enjoy an office *business-engineered* for maximum beauty, comfort and utility.

Soon you're *bound* to consider a new office for executive, professional or general office work. So visit your Invincible dealer — to see, without obligation, this unusually good-looking and useful new furniture. Or a letterhead request brings you *free* the new full-color Invincible catalog.



# INVINCIBLE

**Metal Furniture Company • Manitowoc, Wisconsin**

*In Canada:* A. R. Davey Company, Ltd., Factory Representative  
174 Bedford Road, Toronto 5, Canada

(Circle 121 for more information)



## MANAGEMENT METHODS

Published by  
MANAGEMENT MAGAZINES, INC.  
22 West Putnam Avenue, Greenwich, Conn.

TO

H A STEVENSON, DEAN  
SCHOOL OF BUS ADMIN  
UNIVERSITY OF MICH  
ANN ARBOR MICH  
899 0857 53 00

AUTHORIZED AT BRISTOL, CONN.  
ACCEPTANCE UNDER SECTION 34.64, P.L. & R.